



Derbyshire County Council.

ANNUAL REPORT

ON THE

HEALTH OF DERBYSHIRE

FOR THE YEAR 1898.

BY

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COUNTY MEDICAL OFFICER OF HEALTH.

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*To the Chairman and Members of the Public Health
Committee of the Derbyshire County Council.*

GENTLEMEN,

I have the honour to present to you my Ninth Annual Report on the Health of the Administrative County of Derby, together with a summary of the Annual Reports of the District Medical Officers of Health for the year 1898. It is satisfactory to record that the death-rate from all causes was 16·34, while the birth-rate was 33·01.

The special subjects dealt with in this Report are the means of the purification of sewage, the Report containing a description of an effective and economical manner of purifying village slop water, and the remedial measures which may be taken for the prevention and cure of Phthisis. There is probably no County in England with such excellent sites for Sanatoria for Consumptives, and I can only hope that the prominence which has lately been given to this subject will lead to the erection in Derbyshire of an institution, on the lines of those which are doing such excellent work upon the Continent.

Section (g) of the duties of the County Medical Officer, dated Jan. 28th, 1891, prescribes :—

“He shall advise the Public Health Committee on any Bills introduced into Parliament with reference to—

- (1) The Public Health and matters bearing thereupon.
- (2) The Extension of Towns.
- (3) The Water Supply of Towns.
- (4) The Housing of the Working Classes."

During the year the following Water Bills affecting Derbyshire came before Parliament :—

“The Clay Cross Water Bill ” ;

“The Stockport Corporation Water Bill ” ;

“The New Mills Water Bill ” ;

and the various Bills dealing with the Derwent Valley water.

The first two Bills passed. They were to enable the Local Authorities to purchase the undertakings of Water Companies, the Stockport Water Company, having statutory powers to supply part of New Mills. The New Mills Bill was thrown out “purely on financial grounds.” With regard to the Derwent Valley Water Bills, it became necessary to employ Counsel, Parliamentary Agents, etc., and these Bills were referred to the Parliamentary Committee. The terms which have been obtained and the benefit the Derwent Water Valley Scheme will be to the County generally are explained in the Special Report on the Water Supplies of the County, which is in preparation.

I am, Gentlemen,

Your obedient Servant,

SIDNEY BARWISE.

Derby, August, 1899.

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PUBLIC HEALTH COMMITTEE
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F. WRIGHT,

REPORT ON THE HEALTH OF DERBYSHIRE, 1898.

PART I.

THE COUNTY AS A WHOLE.

POPULATION.

The population estimated to the middle of 1898 was 485,760, the Urban Districts having a population of 238,560, and the Rural Districts 247,200.

BIRTHS.

The birth rate for the year was 33 per 1,000, being 33·26 in the Urban Districts, and 32·77 in the Rural Districts. This difference is very little, and points to the fact that the great bulk of the population in the Rural Districts is of the same character as that of the small Urban Districts.

DEATHS.

The death rate during the year was 16·34. In the Rural Districts it was 15·01 and in the Urban Districts it was 17·72 per 1,000; while the death rate in England and Wales was 17·6. On the whole the death rates from the various causes are satisfactory, but, as in the report for last year, I have again to point out that the unsatisfactory feature of the vital statistics is the death rate from typhoid fever.

ZYMOTIC DEATH RATE.

Table 1 gives the zymotic death rate, and the death rate from each of what the Registrar General groups as the seven principal zymotic diseases,

TABLE I.

Birth Rate and Death Rate from the Seven Principal Zymotic Diseases and all causes in the Whole County during the last Eight Years.

Year.	DEATH RATES PER 1,000 OF POPULATION.								Death Rate from all Causes.	Birth Rate.
	Small Pox.	Scarlatina.	Diphtheria and Membranous Croup.	Typhoidal Fevers.	Measles.	Whooping Cough.	Diarrhœa.	Seven Principal Zymotics.		
1891	— ·002	·17 ·17	·19 ·17	·13 ·16	·21 ·43	·17 ·46	·28 ·46	1·1 1·9	18·9 20·2	35·1 31·4
1892	·03 ·01	·13 ·19	·23 ·22	·17 ·13	·83 ·46	·57 ·45	·4 ·5	2·2 2·0	19·1 19·0	34·1 30·5
1893	·21 ·04	·13 ·23	·21 ·31	·18 ·22	·23 ·37	·27 ·34	·91 ·95	2·1 2·5	17·5 19·2	35·3 30·8
1894	·03 ·02	·14 ·16	·22 ·28	·13 ·16	·26 ·38	·43 ·39	·22 ·34	1·4 1·7	15·4 16·6	33·2 29·6
1895	·01 ·007	·12 ·14	·21 ·25	·12 ·17	·31 ·36	·16 ·29	·81 ·88	1·7 2·1	17·03 18·7	34·9 30·3
1896	·002 ·02	·24 ·18	·16 ·29	·15 ·17	·88 ·56	·37 ·41	·39 ·55	2·2 2·18	16·6 17·1	33·4 29·7
1897	—	·24 ·14	·10 ·24	·20 ·16	·34 ·40	·33 ·35	·63 ·86	1·94 2·15	16·27 17·4	32·67 29·7
1898	— — — ·01	·26 ·10 ·18 ·11	·14 ·12 ·13 ·24	·27 ·16 ·21 ·18	·46 ·31 ·39 ·41	·22 ·23 ·25 ·31	·94 ·77 ·85 ·96	2·32 1·76 2·04 2·22	17·72 15·01 16·34 17·0	33·26 32·77 33·01 29·4

SCARLET FEVER.

In the Urban Districts the death rate from scarlet fever was $\cdot 26$ as compared with $\cdot 11$ in England and Wales. When the various Isolation Hospitals are in working order, the houses in which cases of scarlet fever have occurred, are disinfected by the servants of the District Council, and children from infected houses are prevented from going to school, the death rate from scarlet fever in the Urban Districts will be considerably less than it was during the past year. The districts in which the cases occurred are shown in Table 2.

TYPHOID FEVER.

There was a considerable amount of typhoid fever during the year, the death rate in the Urban Districts being $\cdot 27$ per 1,000, against $\cdot 18$ in the whole of England and Wales.

Evidence accumulates each year that the privy-midden system is largely responsible for the prevalence of this disease in Derbyshire, and I cannot do better than repeat the conclusion of Sir Richard Thorne Thorne given in my last Annual Report:—"The fact that with our present knowledge, such a structure as the common privy midden should still exist in our midst, is the greatest blot which attaches to English sanitary administration at the close of the nineteenth century." The remedial measures to be taken for the prevention of typhoid fever, in addition to obtaining pure water supplies, the importance of which the various District Councils are alive to, are:—

1. The adoption of water closets.
2. The paving of backyards.
3. Public scavenging.
4. The separate collection and destruction by burning, or the application of chloride of lime, of the excreta of typhoid patients.*

Were this last precaution systematically carried out, so as to prevent the typhoid bacilli gaining access to the soil, the disease would be limited, in most instances, to the first case. This separate collection of typhoid excreta is carried out at Blackburn, Nottingham, Huddersfield, and most of the large towns, and during the last four or five years it has been started in Heanor, Long Eaton, Ashbourne, and other Derbyshire districts.

* A convenient pail for this purpose is made by C. Cunliffe, Darwen Street, Blackburn.

INFECTIOUS DISEASES NOTIFICATION ACT.

Table 2 shows the cases which have been notified to the various Medical Officers of Health. The Notification Act becomes compulsory on the 1st of January, 1900, so that there is no necessity for further communications being addressed to the Matlock and Clay Cross District Councils, pointing out to them the desirability of adopting this useful Act.

With the tables is published, as usual, a diagram showing the seasonal prevalence of the various zymotic diseases.

It will be noticed that, as usual, the cases of typhoid fever occur during the autumn when the ground is dry, and filth and dust from the privy middens can be blown about in the process of emptying. The typhoid diagram is an indication of the necessity for the more vigorous use of the water cart, and the removal, by the water carriage system, of excrementitious matters from the proximity of dwellings, before they have had an opportunity of drying so as to be blown about. The large number of cases shown as having occurred during the last week of October were investigated and proved to have no connection whatever with water supply.

SCARLET FEVER.

	Estimated Population, 1898.	Cases.	Deaths.	Case rate per 1,000 of Population.	Case mortality per cent.
Urban Districts.					
Alfreton	17,700	76	1	4.29	1.31
Alvaston and Boulton ..	4,250	15	2	3.52	13.33
Ashbourne	4,000	3	...	0.75	...
Bakewell	2,900	5	...	1.72	...
Baslow	890	...	...	...	...
Belper	11,100	101	7	9.09	6.93
Bolsover	5,550	23	1	4.14	4.34
Bonsall	1,350	3	...	2.22	...
Brampton and Walton	2,700	30	...	11.11	...
Buxton	8,900	64	1	7.18	1.56
Chesterfield (Boro') ...	25,000	121	6	4.84	4.95
*CLAY CROSS	9,000	131	3	14.55	2.29
Dronfield... ..	4,100	15	1	3.65	6.66
Fairfield	2,600	16	...	6.15	...
Glossop (Boro')	23,400	249	12	10.64	4.81
Heage	2,800	...	...	...	...
Heanor	11,500	83	6	7.21	7.22
Ilkeston (Boro')... ..	25,800	19	...	0.73	...
Long Eaton	12,400	80	4	6.45	5.00
*MATLOCK	5,900	...	...	...	...
Matlock Bath	1,960	10	1	5.10	10.00
Newbold and Dunston...	5,550	209	8	37.65	3.82
New Mills	6,720	5	...	0.74	...
North Darley	2,400	7	...	2.91	...
Ripley	10,300	50	5	4.85	10.00
South Darley	820	5	...	6.09	...
Swadlincote	15,500	17	...	1.09	...
Whittington	9,700	162	5	16.70	3.08
Wirksworth	3,770	16	1	4.24	6.25
Urban Districts ...	238,560	1,515	64	6.35	4.22
Rural Districts.					
Ashbourne	10,700	60	1	5.60	1.06
Bakewell, South	8,100	38	1	4.69	2.63
Bakewell, North	10,500	31	1	2.95	3.22
Basford (Derbyshire, part of)	5,800	52	1	8.96	1.92
Belper, A	11,400	56	1	4.91	1.78
Belper, B	13,100	81	6	6.18	7.40
Blackwell	21,000	152	4	7.23	2.63
Chapel-en-le-Frith	13,500	17	...	1.25	...
Chesterfield	68,000	412	7	6.05	1.69
Clown	10,000	59	2	5.90	3.38
*GLOSSOP DALE	4,700	...	...	...	...
Hartshorne and Seals...	6,400	9	...	1.40	...
Hayfield	4,000	4	...	1.00	...
Norton	12,250	64	3	5.22	4.68
Repton	15,100	31	...	2.05	...
Shardlow	30,000	113	...	3.76	...
Sudbury	2,650	9	...	3.39	...
Rural Districts ...	247,200	1,188	27	4.80	2.27
Whole County ...	485,760	2,703	91	5.54	3.36

* Notification Act not in force.

DIPHTHERIA AND MEMBRANOUS CROUP.

	Estimated Population, 1898.	Cases.	Deaths.	Case rate per 1,000 of Population.	Case mortality per cent.
Urban Districts.					
Alfreton	17,700	5	2	0·28	40·0
Alvaston and Boulton...	4,250	1	...	0·23	...
Ashbourne	4,000	4	...	1·0	...
Bakewell	2,900	2	...	0·68	...
Baslow	890	...	...	...	...
Belper	11,100	...	...	...	...
Bolsover	5,550	3	...	0·54	...
Bonsall	1,350	...	...	...	...
Brampton and Walton	2,700	1	...	0·37	...
Buxton	8,900	...	...	...	...
Chesterfield (Boro')	25,000	5	2	0·2	40·0
*CLAY CROSS	9,000	...	...	...	...
Dronfield... ..	4,100	4	...	0·97	...
Fairfield	2,600	...	...	...	...
Glossop (Boro')	23,400	15	7	0·64	46·66
Heage	2,800	...	...	...	...
Heanor	11,500	20	3	1·73	15·00
Ilkeston (Boro')	25,800	12	4	0·46	33·33
Long Eaton	12,400	17	7	1·37	41·17
*MATLOCK	5,900	1	1	0·16	100·0
Matlock Bath	1,960	1	1	0·51	100·0
Newbold and Dunston...	5,550	3	1	0·54	33·33
New Mills	6,720	1	...	0·14	...
North Darley	2,400	1	...	0·41	...
Ripley	10,300	6	...	0·58	...
South Darley	820	4	3	4·87	75·00
Swadlincote	15,500	8	3	0·51	37·50
Whittington	9,700	...	...	...	...
Wirksworth	3,770	...	...	...	...
Urban Districts ...	238,560	114	34	0·47	29·82
Rural Districts.					
Ashbourne	10,700	2	1	0·18	50·0
Bakewell, South	8,100	3	...	0·37	...
Bakewell, North	10,500	2	1	0·19	50·0
Basford (Derbyshire, part of)	5,800	2	...	0·34	...
Belper, A	11,400	6	2	0·52	33·33
Belper, B	13,100	2	...	0·15	...
Blackwell	21,000	16	1	0·76	6·25
Chapel-en-le-Frith	13,500	12	4	0·88	33·33
Chesterfield	68 000	15	6	0·22	40·0
Clown	10,000	9	1	0·90	11·11
*GLOSSOP DALE	4,700	...	...	...	...
Hartshorne and Seals..	6,400	3	2	0·47	66·66
Hayfield	4,000	3	1	0·75	33·33
Norton	12,250	6	1	0·48	16·66
Repton	15,100	4	1	0·26	25·0
Shardlow	30,000	33	9	1·10	27·27
Sudbury	2,650	1	...	0·37	...
Rural Districts ...	247,200	119	30	0·48	25·21
Whole County ...	485,760	233	64	0·47	27·46

* Notification Act not in force.

TABLE II.—Continued.

TYPHOID FEVER.

	Estimated Population, 1898.	Cases.	Deaths.	Case rate per 1,000 of Population.	Case mortality per cent.
Urban Districts.					
Alfreton	17,700	12	1	0·67	8·33
Alvaston and Boulton...	4,250	...	...	...	...
Ashbourne	4,000	1	...	0·25	...
Bakewell... ..	2,900	6	...	2·06	...
Baslow	890	...	...	...	...
Belper	11,100	9	...	0·81	...
Bolsover	5,550	10	...	1·80	...
Bonsall	1,350	...	...	...	...
Brampton and Walton	2,700	...	...	...	...
Buxton	8,900	4	1	0·44	25·00
Chesterfield (Boro') ...	25,000	47	5	1·88	10·63
*CLAY CROSS	9,000	28	2	3·11	7·14
Dronfield... ..	4,100	...	...	...	...
Fairfield	2,600	...	...	...	...
Glossop (Boro')	23,400	84	15	3·58	17·85
Heage	2,800	...	...	...	...
Heanor	11,500	27	5	2·34	18·51
Ilkeston (Boro')... ..	25,800	115	32	4·45	27·82
Long Eaton	12,400	16	2	1·29	12·5
*MATLOCK	5,900	...	...	...	...
Matlock Bath	1,960	1	...	0·51	...
Newbold and Dunston	5,550	4	1	0·72	25·00
New Mills	6,720	...	...	...	...
North Darley	2,400	14	1	5·83	7·14
Ripley	10,300	1	...	0·09	...
South Darley	820	...	...	...	...
Swadlincote	15,500	16	1	1·03	6·25
Whittington	9,700	2	...	0·20	...
Wirksworth	3,770	...	...	...	...
Urban Districts ...	238,560	397	66	1·66	16·62
Rural Districts.					
Ashbourne	10,700	1	...	0·09	...
Bakewell, South	8,100	3	...	0·37	...
Bakewell, North	10,500	6	2	0·57	33·33
Basford (Derbyshire, part of)	5,800	...	...	...	...
Belper, A	11,400	13	1	1·14	7·69
Belper, B	13,100	...	...	...	...
Blackwell	21,000	126	10	6·00	7·93
Chapel-en-le-Frith	13,500	1	...	0·07	...
Chesterfield	68,000	57	12	0·83	21·05
Clown	10,000	15	2	1·5	13·33
*GLOSSOP DALE	4,700	...	5	...	...
Hartshorne and Seals...	6,400	8	4	1·25	50·00
Hayfield	4,000	1	...	0·25	...
Norton	12,250	16	2	1·30	12·50
Repton	15,100	1	...	0·06	...
Shardlow	30,000	13	1	0·43	7·69
Sudbury	2,650	2	1	0·75	50·00
Rural Districts ...	247,200	263	40	1·06	14·20
Whole County ...	485,760	660	106	1·35	16·09

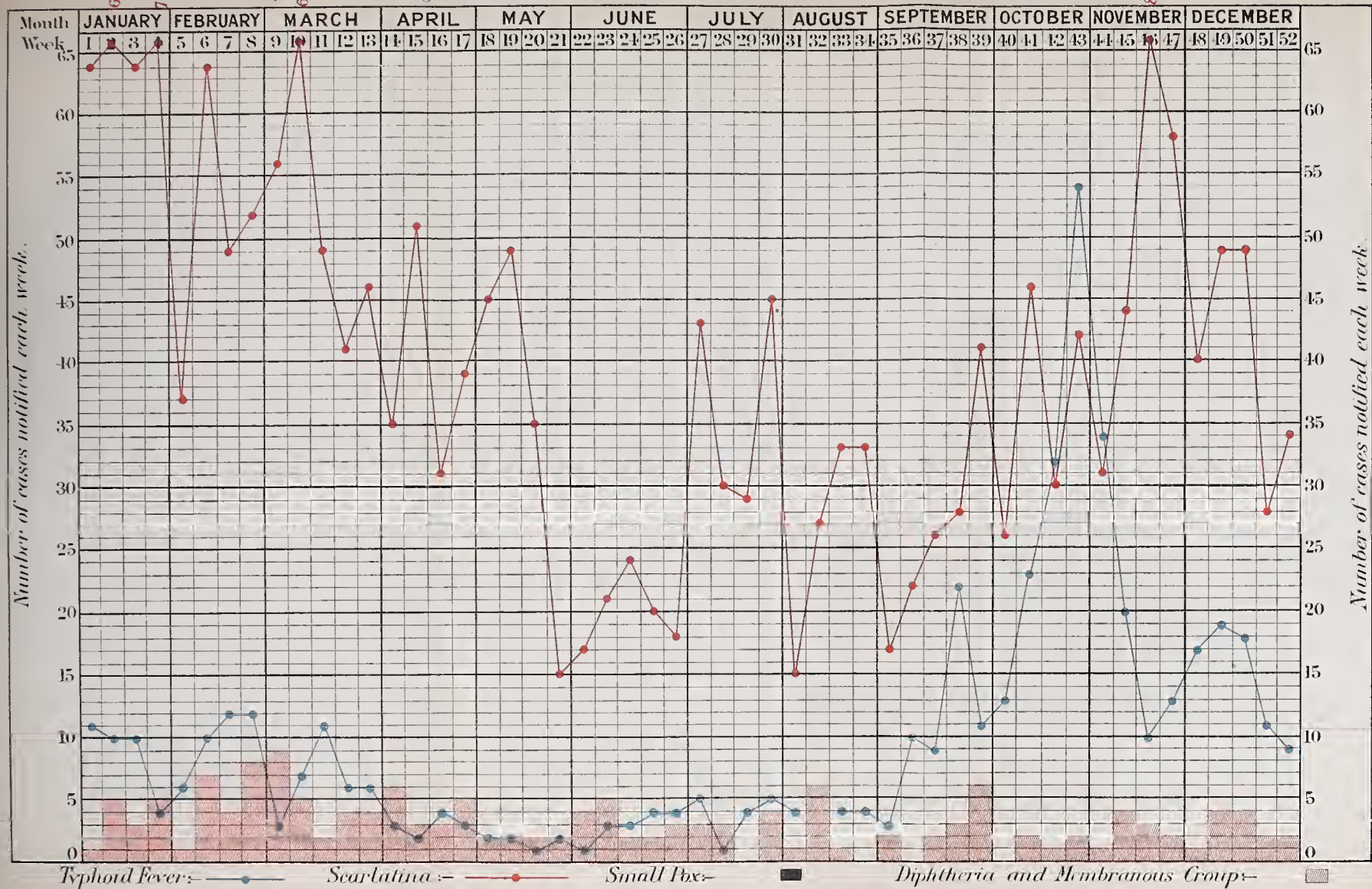
* Notification Act not in force.

PUERPERAL FEVER AND ERYSIPELAS.

	Esti- mated Popula- tion, 1898.	Cases.		Deaths.		Case rate per 1,000 of Pop.		Case mortality per cent.	
		Puer- peral Fever.	Ery- sipelas	Puer- peral Fever.	Ery- sipelas	Puer- peral Fever.	Ery- sipelas	Puer- peral Fever.	Ery- sipelas
Urban Districts.									
Alfreton	17,700	2	23	2	1	0·11	1·29	100·0	4·34
Alvaston and Boulton	4,250	...	1	...	...	...	0·23	...	...
Ashbourne	4,000	...	6	...	...	...	1·50	...	...
Bakewell	2,900	...	11	...	...	...	3·79	...	...
Baslow	890	...	1	...	...	...	1·12	...	...
Belper	11,100	1	8	1	...	0·09	0·72	100·0	...
Bolsover	5,550	1	14	...	...	0·01	0·25	...	...
Bonsall	1,350	...	1	...	...	...	0·73	...	...
Brampton and Walton	2,700	...	...	...	...	...	...	...	...
Buxton	8,900	...	2	...	...	...	0·22	...	...
Chesterfield (Boro')	25,000	5	23	3	...	0·20	0·92	60·0	...
*CLAY CROSS	9,000	1	2	1	2	0·11	0·22	100·0	100·0
Dronfield	4,100	1	1	1	...	0·24	0·24	100·0	...
Fairfield	2,600	1	...	...	...	0·38	...	...	...
Glossop (Boro')	23,400	4	25	...	1	0·17	1·06	...	4·0
Heage	2,800	...	...	...	...	...	...	...	...
Heanor	11,500	1	7	1	...	0·08	0·60	...	...
Ilkeston (Boro')	25,800	5	12	2	...	0·03	0·46	40·0	...
Long Eaton	12,400	2	21	...	...	0·16	1·69	...	...
*MATLOCK	5,900	...	...	...	...	...	...	...	...
Matlock Bath	1,960	...	...	...	...	...	...	...	...
Newbold and Dunston	5,550	...	4	...	...	...	0·72	...	...
New Mills	6,720	2	6	2	...	0·29	0·88	100·0	...
North Darley	2,400	...	1	...	...	...	0·41	...	...
Ripley	10,300	2	10	...	...	0·19	0·97	...	...
South Darley	820	...	...	...	...	...	...	...	...
Swadlincote	15,500	1	28	...	1	0·06	1·80	...	3·57
Whittington	9,700	...	12	...	1	...	1·23	...	8·33
Wirksworth	3,770	...	...	...	...	...	...	...	...
Urban Districts ...	238,560	29	219	13	6	0·12	0·91	44·82	2·73
Rural Districts.									
Ashbourne	10,700	...	4	...	...	...	0·37	...	...
Bakewell, South ...	8,100	1	6	...	...	0·12	0·74	...	...
Bakewell, North ...	10,500	...	2	...	...	...	0·19	...	...
Basford (Derbyshire, part of)	5,800	1	6	1	...	0·17	1·03	100·0	...
Belper, A	11,400	2	1	1	...	0·17	0·08	50·0	...
Belper, B	13,100	...	2	...	...	...	0·15	...	...
Blackwell	21,000	7	32	1	...	0·33	1·52	14·28	...
Chapel-en-le-Frith ...	13,500	...	...	...	...	...	...	...	...
Chesterfield	68,000	10	70	4	3	0·14	1·02	40·0	4·28
Clown	10,000	1	8	1	...	0·10	0·80	100·0	...
*GLOSSOP DALE	4,700	...	...	...	...	...	...	...	...
Hartshorne and Seals	6,400	...	13	...	...	...	0·20	...	...
Hayfield	4,000	...	3	...	...	...	0·75	...	...
Norton	12,250	2	10	...	...	0·13	0·06	...	...
Repton	15,100	...	4	...	...	...	0·26	...	...
Shardlow	30,000	5	12	1	1	0·16	0·40	20·0	8·33
Sudbury	2,650	...	...	...	...	...	...	...	...
Rural Districts ...	247,200	29	173	9	4	0·01	0·69	31·03	2·31
Whole County ...	485,760	58	392	22	10	0·11	0·80	37·93	2·60

* Notification Act not in force.

Diagram, shewing Seasonal prevalence of the four chief Zymotic diseases 1898



ISOLATION HOSPITALS ACT, 1893.

Since the last report was written, the Belper Isolation Hospital has been opened. The High Peak Hospital is in the course of construction. Three sites have been acquired by the North Derbyshire Hospital Committee, and one site by this Committee in conjunction with the Chesterfield Hospital Committee. Plans of four hospitals have been approved, and have been submitted to the Local Government Board.

At last a site has been selected by the Shardlow Hospital Committee, and I hope next year to record that plans have been submitted to the Local Government Board for their approval. I regret that I am not in a position to report any further progress by the Haddon Hospital Committee.

INFANTILE MORTALITY.

The Infantile Mortality, that is to say, the number of children dying during the first year of life out of every 1,000 born, was 175·2 per 1,000 in the Urban Districts of Derbyshire, as compared with 161 per 1,000 in England and Wales. The highest rate was recorded in Chesterfield, namely, 231·4 per 1,000.

The Registrar-General pointed out some years ago that the infantile death rate was least in the purely agricultural districts, while it was the highest in the mining and manufacturing districts, such as Chesterfield. The cause for this high death rate is being thoroughly investigated by Dr. Richards, M.O.H., of Chesterfield, and, with the aid of a voluntary Sick Nursing Society, valuable information is being obtained. I cannot do better than give the conclusions that Dr. Richards has arrived at in his own words:—

“I have repeatedly expressed the opinion that the high infantile death rate, and more especially that part which is assigned to diarrhœa, is due to the ignorance of the right method of reeding children, and to neglect of the elementary laws of health. For nearly two years the Infant Life Protection Society has attempted to educate those entrusted with the care of infants.

“Some 372 infantile deaths were the object of detailed enquiry, while similar particulars were ascertained in the case of 408 children who managed to survive the manifold dangers of the first year of life.

“The facts elicited are briefly as follows:—

“*Overcrowding* did not appear to be specially prevalent where deaths had taken place, with the possible exception of those houses where infants died within the first week of life.

The numbers falling into those groups are, however, too small to be absolutely reliable.

“Employment of Mothers.—Nineteen per cent. of the mothers of surviving children were more or less employed, as compared with 22 per cent. in the case of children dying under one year. The difference is not so marked as one would have expected, but this is doubtless due to the fact that local circumstances are such as enable mothers to live sufficiently near their work to return home at intervals to nurse their infants. Under such conditions, especially where the family is small, it is quite possible that the employment of mothers may be actually beneficial, inasmuch as the extra money earned augments the resources of the family.

“Illegitimacy was more than twice as high among those dying as among the survivors.

“Insurance.—No connection could be traced between this and infantile mortality. About 60 per cent. of infants between one week and six months of age are insured, and there was no excess of insurance among the non-surviving class.

“Condition of Premises.—This was tabulated under two heads: (1) as to structure; (2) as to maintenance, including cleanliness. The structural condition of houses in which surviving children lived was good in 47 per cent. of the cases, but in only 35 per cent. of those dying. Defects were most marked in the cases where deaths had been due to diarrhœal diseases.

Similarly, maintenance was distinctly good in the case of 65 per cent. of the survivors, as contrasted with 53 per cent. of the dying. House where diarrhœal deaths had occurred fell distinctly short of the standard reached by the houses of survivors.

“Feeding.—It was in respect to methods of feeding that the difference between the two classes was most marked. Under six months of age an infant, if practicable, should only be suckled. It is, however, occasionally impossible to adopt this plan, and even when possible there is a pernicious local custom of supplementing the natural food of the infant with the most extraordinary compounds.

“For instance, one infant that died at the age of two months was not only being fed at the breast, but was receiving bread, chip potatoes, bloaters, ‘pobs,’ and condensed milk.

“Confining our attention to infants over one week and under six months, and dividing them into three groups, we find the following percentage differences:—

	Survivors per cent.	Deaths from Diarrhœa per cent.	Deaths from all other causes per cent.
Breast fed only ...	42	11	27
Breast and food ...	42	22	37
Food only ...	16	67	36

“In other words, while 42 per cent. of the surviving infants received only the food which nature intended for them, only 11 per cent. of the children dying from Diarrhœa, and 27 per cent. of those from other causes were equally fortunate.

“Looking at it in another way, it is remarkable that, while only 16 per cent. of the surviving children were entirely subjected to risks of the hand feeding, no less than 67 per cent. of those dying from other causes were so subjected.”

Dr. Richards gives important statistics as to each cause of death. Perhaps the most striking is the fact that Diarrhœa and Inflammation of the Bowels caused, in proportion, nearly eight times as many deaths in the Borough of Chesterfield as in rural counties of England. Bearing this point in mind in connection with the known insufficiency of the water supply of Chesterfield and the relation which has been proved to exist between Diarrhœa and high earth temperature on the one hand and dust on the other, one is forced to the conclusion that one of the chief remedial measures to be taken in the Urban Districts is the energetic use of the water cart, and the liberal employment of water for the flushing of the surfaces of common yards and courts and alleys.

PHTHISIS AND TUBERCULOSIS.

A large number of reports refer to the prevalence of these diseases, and to the precautions which should be taken to prevent their spread and reduce the mortality therefrom. This, no doubt, is in part due to the resolutions which have been passed on this question by the British Medical Association.

The precautionary measures recommended by the British Medical Association may be classified under the following headings:—

- (1.) *Dwellings.* Every house should be erected on a dry site, with sufficient space around to permit of free access of sunlight and air, as in accordance with the model Bye Laws of the Local Government Board.
- (2.) *Bacterial Diagnosis and Disinfection.* Arrangements should be made for the bacterial diagnosis of tuberculosis free of charge. The local authorities should also cause every house in which cases of Phthisis exist to be periodically disinfected.
- (3.) *Milk, Enforcement of Dairies, Cowsheds, and Milkshops Orders.* The above Orders and the model regulations issued this year by the Local Government Board should be put in force.

On this point there is nothing to be added to the report I made to your Committee in 1896 (pages 16 to 22), and the regulations there published, which were drafted after a careful consultation with the Derbyshire Dairy Farmers' Association and Mr. Gilbert Murray, contain a fair compromise, taking into consideration what is really necessary and what is practical in the present state of the dairy industry.

- (4.) *Meat.* In a county like Derby, where the Sanitary districts are too small to employ the services of a properly qualified Meat Inspector, and where there are no public abattoirs, proper meat inspection is practically impossible. The British Medical Association suggests that the County Councils should make arrangements with the constituent District Councils for the employment of a properly qualified inspector. Such an inspector should be a young veterinary surgeon who has been trained in bacteriology, so that his services might also be available to the County Council under the Contagious Diseases of Animals Act.*

The Royal Commission on Tuberculosis recommended that the Local Government Board should issue instruction from time to time for the guidance of meat inspectors, prescribing the degree of tubercular disease which should cause the carcase or part thereof to be seized, and the Local Government Board have recently issued the following suggestions:—

RULES WITH REGARD TO THE CONDEMNATION OF MEAT.

- | | | |
|--|---|--|
| <p>“(a) When there is miliary tuberculosis
of both lungs - - - - -</p> <p>“(b) When tuberculous lesions are
present on the pleura and
peritoneum - - - - -</p> <p>“(c) When tuberculous lesions are pre-
sent in the muscular system or
in the lymphatic glands em-
bedded in or between the muscles</p> <p>“(d) When tuberculous lesions exist
in any part of an <i>emaciated</i>
carcase - - - - -</p> | } | <p>The <i>entire</i> carcase
and all the organs
may be seized.</p> |
|--|---|--|

* I believe such an officer has recently been appointed by the Glamorgan-shire County Council.

“(a) When the lesions are confined to the lungs and the thoracic lymphatic glands - - -	} The carcase, if otherwise healthy, shall not be con- demned, but every part of it containing tuberculous lesions shall be seized.
“(b) When the lesions are confined to the liver - - -	
“(c) When the lesions are confined to the pharyngeal lymphatic glands	
“(d) When the lesions are confined to any combination of the foregoing, but are collectively small in extent)	

“In view of the greater tendency to generalisation of tuberculosis in the pig, we consider that the presence of tubercular deposit in any degree should involve seizure of the whole carcase and of the organs.

“In respect of foreign dead meat, seizure shall ensue in every case where the pleura have been ‘stripped.’

“The Board may at the same time draw attention to Article 19 (7) of their General Order of the 23rd March, 1891, with respect to the duties of an inspector of nuisances in relation to the inspection and seizure of meat. They may point out that where an inspector of nuisances is appointed under that Order, or under any order superseded by that Order, he is required by the Article, in any case of doubt arising under it, to report the matter to the Medical Officer of Health with a view of obtaining his advice thereon.”

(5.) *Isolation and Treatment.* The British Medical Association recommended that Poor Law Guardians and Sanitary Authorities should be encouraged to provide suitable accommodation for the treatment of consumptive patients.

The Corporation of Derby have recently appointed a Committee to visit some of the chief Sanatoria on the Continent for the open-air treatment of consumptives, and the following recommendations, condensed from Dr. Howarth's Annual Report, embody the conclusions their Committee came to:—

(1.) Although the value of Sanatoria treatment* is great to the patient, the probability of cure or restoration to working power is not sufficiently high as compared with the numbers returned as “improved” to warrant the expenditure of public money in a Municipal Sanatorium.

* See table at foot of next page.

- (2.) Having in view the fact of the infectious nature of Phthisis, and special incidence on persons of lowered vitality, the principle of treating cases of pulmonary tuberculosis in general hospitals is undesirable, and, although the idea of a Municipal Sanatorium is deprecated, nevertheless, separate institutions should be erected for the treatment of phthisis either by private enterprise or public subscription, and the advantages which isolation of *suitable* cases (from the public health standpoint) would confer upon the public would be sufficient justification for the payment of the weekly charge which removal of such cases would entail.
- (3.) Many cases of slight lung trouble, the symptoms of which are somewhat obscure, and prevent a positive diagnosis being arrived at, would undoubtedly benefit if the expectoration could readily, and without expense being entailed, be submitted to bacteriological diagnosis. This would not prove either a difficult or expensive matter, and could be undertaken in conjunction with the bacteriological diagnosis of other infectious ailments.

The physical conditions of Derbyshire are such that excellent sites could be found, particularly on the mountain limestone, for the treatment of consumptives, and I earnestly hope that Derbyshire will not be behind other counties in the movement which has been started to provide suitable hospitals for the

The following TABLE gives the RESULTS OF TREATMENT in pay Sanatoria:—

Name of Sanatorium.	Number of Cases.	Stages of Disease. Admitted	Percentage Results.			Total proportion Improved
			Apparently Cured.	Nearly Cured.	Improved.	
Brehmer.....	5,032	All	11	15·6	...	...
„ exclusive of third stage	3,615	1 and 2	14·9	20·9	...	...
Falkenstein	1,022	? 1 and 2	13·2	11	...	...
Rieboldsgrün	2,000	? 1 and 2	13·6	28	28·6	70·2
„	715	? 1 and 2	...	...	...	78·
Hohenhonnef	...	? 1 and 2	14·5	28·9	...	69·
Ruppertshain	313	...	...	...	..	77·6
Hanseatic Insurance Co.	1,541	slightly affected	...	...	...	...
		30·9 %				
Local	...	...	...	...	...	58·1
General	...	...	...	...	...	85·5
Adirondack	mean of 10 years	...	20·25	20·30	...	...

treatment of consumptives. With regard to the Bacteriological Diagnosis of Tuberculosis, I have fitted up all the necessary apparatus, but without some assistance it would be impossible to carry out this work.

The following leaflet has been drawn up as suitable for distribution to the public.

PRECAUTIONS AGAINST CONSUMPTION.

Consumptive persons should remember that they are not suffering from an absolutely incurable disease, and also that they possess to a great extent the power of preventing other persons taking the disease:—

1. Sunlight and fresh air are the greatest enemies to the infection, and are also of the greatest assistance in promoting a cure. Consumptives should sleep alone with the bedroom windows open top and bottom, and during the day time keep out of doors as much as possible, and whilst indoors occupy well ventilated rooms.

It is chiefly by the expectoration (spit) that the infection is spread, and the following rules should be strictly observed.

2. Indoors—the expectoration should be received into small paper bags and at once burnt; at night, spitting cups containing a little disinfectant should be used. These should be washed out with boiling water daily.

3. Out of doors—spitting in streets, tramcars, or any public places, should be carefully avoided; a suitable vessel should be carried about into which the expectoration may be received, and which afterwards may be washed out with boiling water.

4. If handkerchiefs are used *they should never be allowed to become dry*, but should be soaked in boiling water whilst the expectoration is still moist. It is in the dry condition that the expectoration becomes dangerous.

5. Dry cleansing of the room occupied by consumptives should be dispensed with as much as possible; wet cleansing should be substituted, and all refuse from the room should be at once burnt.

DAIRIES, COWSHEDS, AND MILKSHOPS, BAKEHOUSES, SLAUGHTER-HOUSES, COMMON LODGING-HOUSES, AND WORKSHOPS.

The following tables show the work which has been done in each sanitary district with regard to dairies, cowsheds, and milkshops, bakehouses, slaughter-houses, offensive trades, common lodging-houses, and workshops, with regard to all of which the Sanitary Authorities have special powers to exercise and duties to perform.

It is evident from the incomplete nature of the table that many of the Rural District Councils are making default in not enforcing the Dairies, Cowsheds, and Milkshops Orders, but as this is the first year in which the return has been made, it is possible that the omissions may be due to an oversight in some cases. I hope, however, that the Medical Officers of Health and the Sanitary Inspectors of the various districts will see that next year the returns for their districts are complete.

RURAL DISTRICTS.

RURAL DISTRICTS.	DAIRIES AND COWSHEDS.			BAKEHOUSES.			SLAUGHTER HOUSES.			COMMON LODGING HOUSES.			WORKSHOPS.		
	Number on Register.	Number of Inspections.	Number of Notices served for infringement of Bye Laws.	Number on Register.	Number of Inspections.	Number of Notices served for infringement of Bye Laws.	Number on Register.	Number of Inspections.	Number of Notices served for infringement of Bye Laws.	Number on Register.	Number of Inspections.	Number of Notices served for infringement of Bye Laws.	Number on Register.	Number of Inspections.	Number of Notices served for infringement of Bye Laws.
Ashbourne	192	..	..	..	3	..	..	10	4	1	6	1	..	..	..
Bakewell (South)...	..	..	..	..	6	..	..	13	..	4	24	..	..	..	..
Bakewell (North)...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Basford	4	22	..	..	..	..	..	..	..	..	..	..	..	..	..
Belper	..	30	..	..	43	..	..	97	..	..	..	..	..	..	..
Blackwell	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chapel-en-le-Frith	..	..	..	..	..	..	122	..	..	2	..	..	..	..	..
Chesterfield	..	..	..	..	..	..	..	..	..	..	10	..	..	..	..
Clown	110	17	..	..	4	..	..	1	..	1	..	..	..	..	..
Glossop Dale	..	..	..	..	..	..	..	4	1	..	..	..	..	..	..
Hartshorn and Seals	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..
Hayfield	..	..	..	1	4	2	2	24	..	..	..	..	..	11	..
Norton	..	159	8	..	8	..	1	19	..	..	..	..	..	..	..
Repton	234	240	5	..	10	..	..	36	..	..	..	..	..	..	..
Shardlow	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sudbury	..	117	..	..	4	..	..	4	..	..	..	..	..	..	..

URBAN DISTRICTS.

	DAIRIES AND COWSHEDS.			BAKEHOUSES.			SLAUGHTER HOUSES.			OFFENSIVE TRADES.			COMMON LODGING HOUSES.			WORKSHOPS.		
	Number on Register.	Number of Inspections.	Number of Notices served for infringements of Bye Laws.	Number on Register.	Number of Inspections.	Number of Notices served for infringements of Bye Laws.	Number on Register.	Number of Inspections.	Number of Notices served for infringements of Bye Laws.	Number on Register.	Number of Inspections.	Number of Notices served for infringements of Bye Laws.	Number on Register.	Number of Inspections.	Number of Notices served for infringements of Bye Laws.	Number on Register.	Number of Inspections.	Number of Notices served for infringements of Bye Laws.
Alfreton	50	55	3	13	60	6	22	160	6	..	2	..	3	20	4	..	5	..
Alvaston and Boulton ...	14	14	..	3	3	..	3	3	..	..	9	..	2	12	..	..	..	..
Ashbourne	..	..	..	..	..	..	11	44	..	..	..	..	..	..	..	..	..	..
Bakewell	..	..	..	..	20	2	6	24	..	..	..	..	..	..	..	..	..	..
Baslow	8	32	..	2	8	..	4	20	..	..	..	..	1	4	..	..	16	2
Belper	..	..	..	10	20	..	13	36	..	..	..	..	..	5	..	..	..	..
Bolsover	13	23	..	..	7	..	..	15	..	..	..	..	1	..	..	..	..	..
Bonsall	18	..	..	..	..	..	2	25	..	..	..	..	..	..	..	..	..	..
Brampton and Walton ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Buxton	21	56	..	23	72	..	8	296	..	..	..	..	..	..	..	..	..	..
Chesterfield (Borough)...	34	73	1	17	45	..	33	141	..	..	..	..	11	58	4	..	53	13
Clay Cross	28	48	1	..	15	3	12	84	1	..	..	..	5	30	1	..	75	..
Dronfield	6	36	..	..	..	..	4	48	..	..	..	..	1	30	..	..	..	..
Fairfield	17	39	..	2	15	..	1	13	..	..	..	..	..	..	..	..	9	..
Glossop (Borough) ...	..	43	..	..	8	..	..	60	..	..	..	..	..	46	..	..	27	..
Heage	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Heanor	49	122	..	13	30	..	17	68	..	..	..	..	..	19	..	..	..	..
Ilkeston (Borough) ...	28	54	..	23	46	..	18	80	..	..	..	..	3	16	..	..	12	..
Long Eaton	..	..	..	..	14	..	7	13	..	..	..	..	1	30	..	..	..	..
Matlock	..	..	..	..	..	..	1	31	1	..	..	..	..	..	..	..	..	..
Matlock Bath	3	3	..	3	5	..	5	9	4	..	..	..	..	..	..	..	..	..
Newbold and Dunstan...	..	..	..	..	..	..	..	5)	..	..	..	..	..	..	..	..	..	..
New Mills	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Darley	..	..	..	..	2	1	..	19	..	..	..	..	..	30	..	..	..	..
Ripley	..	24	..	..	10	..	..	..	..	..	..	..	..	..	..	..	..	..
South Darley	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Swadlincote	32	128	..	17	68	1	25	100	1	..	..	..	..	..	..	..	..	..
Whittington	..	..	..	5	20	1	11	44	1	..	..	..	..	..	..	..	..	..
Wirksworth	22	20	1	..	..	..	6	16	..	..	..	..	..	10	2	..	..	..

SEWAGE PURIFICATION.

In the Annual Report for 1896, acting upon an instruction from the Public Health Committee, I published a special report on the "Purification of Sewage." Briefly, the method of purification advocated was precipitation and intermittent filtration through coal, or other suitable material. Further experience has led me in no way to alter the opinions I then expressed upon the general unsuitability of the land of Derbyshire for the purification of sewage.

A large part of the surface of the county is composed of stiff clay, either the boulder clay, the clay of the coal measures, or the new red marl. With regard to the unsuitability of this last soil for purification of sewage, no better example could be taken than that of the County Asylum Sewage Farm, where there is as much as an acre of land for the sewage of twenty-five persons. The following analyses show the purification which is effected:—

IRRIGATION OF STIFF CLAY LAND.

MICKLEOVER ASYLUM.

Parts per 100,000.

	Total Solids.	Chlorine.	Free Ammonia.	Organic Ammonia.	Nitrogen as Nitrates.
Drinking Water ...	82	3·7	·000	·001	·6
Mickleover Sewage ...	107·8	9·2	2·5	·6	Nil.
„ Effluent...	79·6	6·2	1·14	·20	·12

RESULTS OBTAINED BY PRECIPITATION AND SUBSEQUENT IRRIGATION OF STIFF LAND.

Even where precipitation has been adopted good effluents are not produced, unless biological filters are also used. The following table gives the results obtained at Alfreton, Ilkeston, Chesterfield, and Long Eaton.

	Population drained.	Area in Acres.	Persons per Acre.	Geological Formation.	Form of Tank.	Precipitant.	No. of Analyses.	Effluent parts per 100,000.	
								Organic Ammonia	Nitrogen as Nitrates.
Alfreton ...	10,500	26	400	Coal Measures	Modified Dortmund	Alumino Ferric	15	·20	·12
Ilkeston ...	25,000	50	500	„	„	„	15	·27	·03
Chesterfield.	25,000	34	735	„	Flat bottomed continuous flow	Lime and Alumino Ferric	23	·41	Nil.
Long Eaton	11,500	14	821	New Red Marl	„	„	4	·40	Nil.

RELATIVE PURIFICATION AFFECTED BY PRECIPITATION AND LAND.

The relative amount of purification effected by precipitation, and by the land, I have demonstrated in the case of Alfreton and Ilkeston, with the following result:—

	Sewage Organic Ammonia.	Tank Effluent Organic Ammonia.	Land Effluent.
Alfreton	1·15	·38	·20
Ilkeston	1·15	·35	·27

It is obvious, in the face of these analyses, that the stiff clay land of the coal measures, and the new red marl are not suitable for the purification of sewage. The results obtained cannot at all compare with the effluents from biological filters of coal, as will be seen by a glance at the following analyses of effluents obtained from the coal filters:—

RESULTS WITH COAL FILTERS.

	Organic Ammonia Tank Effluent.	Parts per 100,000 Filtrate.	Reduction in Organic Ammonia per cent.
Wolverhampton (average of 3 samples)...	·33	·08	76
Chesterfield (average of 11 samples) ...	·66	·17	76
Chesterfield new large filter (average of 6 samples)	·66	·08	87
Lichfield (1 sample)	·26	·08	69
Long Eaton (1 sample)	·48	·1	78
Buxton (average of 5 samples).....	·155	·035	75·6

These filters act chemically and biologically; the dissolved organic matter does not pass out of the filter in the same condition that it enters it—namely, as albuminous matter—but as nitrates. With these coarse-grained artificial filters much more sewage can be passed through in the twenty-four hours than could be passed through land, but little purification would be effected if more than 200 or 300 gallons per square yard per day were filtered. This will be perfectly obvious when we bear in mind that about half the weight of the nitrates produced consists of oxygen, and that, therefore, to produce the nitrates* the nitrifying organisms must be freely supplied with oxygen by causing the filter to be emptied periodically, and thus systematically recharged with fresh air.

* These nitrates are quite harmless, they are, in fact, a store of oxygen for the river water to call upon in case of need. As a rule the particular nitrates which are formed are nitrate of ammonia and nitrate of lime. The general characteristics of nitrates are similar to nitrate of potash or saltpetre.

I have had an opportunity of having experiments tried with various filtering materials, and the results obtained with coal are uniformly the best. The reason for this, I believe, is that the coal has a clean fracture, and when washed free from dust permits the sewage to run freely out, so that its place is taken by fresh air, while in the cases of sand and other fine-grained filters, capillary attraction prevents the air being renewed, and in the case of such substances as coke breeze, the air in the little *cul de sacs* of the material never gets changed. Whatever the reason is, there is no doubt that excellent results are produced with coal filters. The following table gives the comparative purification effected by coke breeze, destructor ashes, and coal filters.

COMPARATIVE TEST OF COAL AND OTHER FILTERS AT BUXTON.

	Organic Ammonia parts per 100,000.	Nitrogen as Nitrates.	Chlorine.	Purification effected in Organic Ammonia per cent.
Tank Effluent (average of 6 samples)	·155	Trace	2·5	—
Coke Breeze (" 8 ")	·071	·33	2·3	51
Destructor Ashes (" 8 ")	·065	·3	2·3	55
Coal (" 5 ")	·035	·5	2·3	75·6

In the first place it should be distinctly understood that the rate of filtration must not exceed 250 gallons per square yard per day. The method of applying the sewage to the filter is also a matter of some importance. At Chesterfield, Alderman James Pearson and the Medical Officer of Health, Dr. Richards, have devised a most ingenious and excellent arrangement, which is at the same time perfectly simple, yet thoroughly efficient. The arrangement consists of a number of distributing pipes upon the surface of the coal filter. The pipes are perforated by quarter-inch holes. Fixed over the top of each hole is a metal disc. Every minute 100 gallons of the sewage is forced, by means of a Shone's Ejector, through the perforated pipes, and impinging upon the metal discs it is distributed in a fine spray over the filter. This process takes place in about twelve seconds. The filter then remains without receiving any more sewage the remainder of the minute when the ejector again comes into action.

The excellent results obtained by this arrangement are shown below:—

CHESTERFIELD EXPERIMENTAL FILTER.

Organic Ammonia in parts per 100,000.						
	June 9.	June 14.	June 15.	June 29.	June 30.	July 11
Tank Effluent	·52	·60	·60	1·0	·52	·20
Roughing Filter ...	·26	·36	·36	·48	·36	·18
Coal Filter	·08	·10	·08	·10	·06	·08
„	—	—	Nil	—	·8	1·20

I have also collected samples for bacteriological examination, which gave the following number of organisms per c.c. These results are equally satisfactory to those obtained upon chemical analysis.

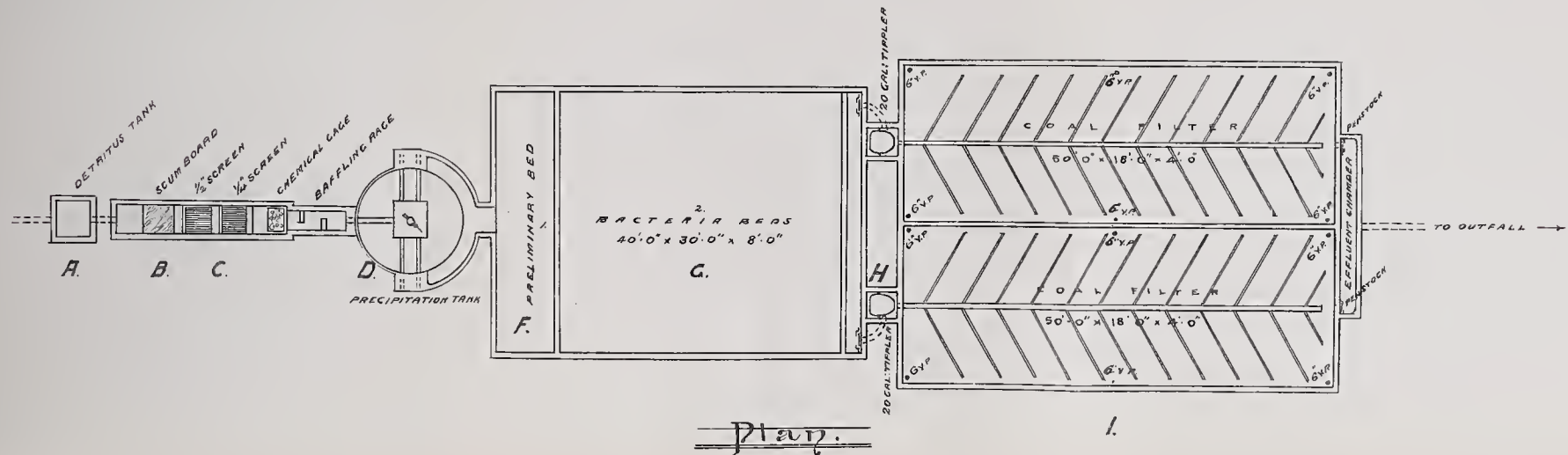
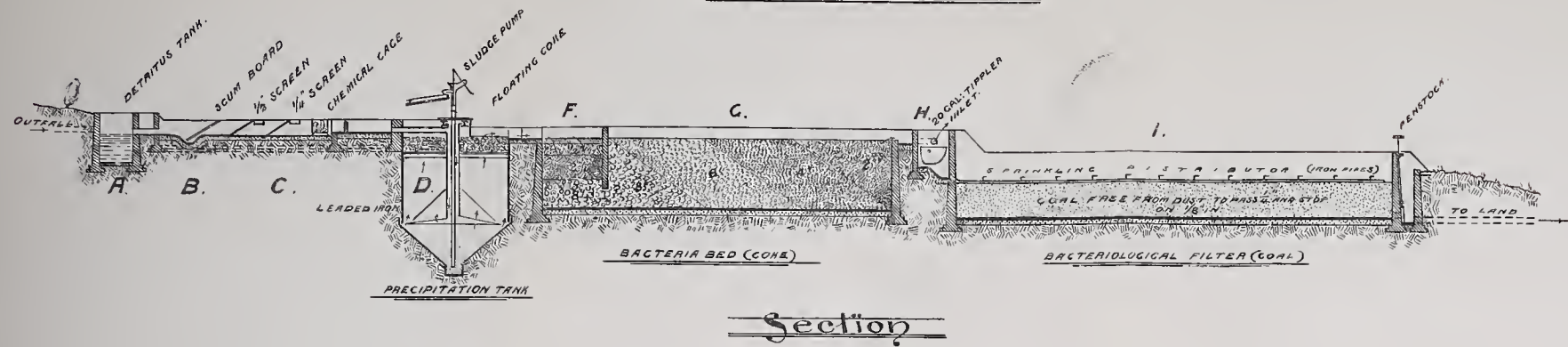
	Bacteria per c.c.
Raw Sewage	41,000,000
Tank Effluent	2,000,000
Roughing Filter	1,000,000
Land Effluent	2,200,000
Coal Filter	130,000

As a footnote in my Annual Report for 1896 I made the following remark, see page 39:—“There is no doubt that in the near future the suspended matters will be liquefied by liquefying bacteria (bacteriolysis). The whole procedure of sewage purification will then consist of two processes of bacterial filtration. The work to be done by the nitrifying filters will be enormously increased, and the filters will therefore have to be made proportionately larger.” At that time, although various interesting experiments were being tried, I did not feel justified in advising the Authorities of Derbyshire to carry out a purely bacteriological process; but since then I have been trying a simple form of bacteriological purification process at my own house, and I have no doubt that for small villages a dual system of filtration, such as I hinted at, is practicable.

There are two bacteriological methods which may take the place of precipitation. The first is to liquefy the sludge in a large closed tank—this is known as the Exeter Septic process, and for weak sewages I have no doubt it is suitable. The other method simply consists of filtering the sewage laterally through a coarse material, such as clinker or engine ashes, broken pots, etc. This is what is being done by the roughing filter at Chesterfield. The bacteria which grow upon the surface of the clinker have the power of liquefying organic matter. In the process of fermentation they produce large volumes of marsh gas. In the Exeter Septic tank these gases are disposed of without any nuisance by burning, and in the cases of large bacteria beds, acting on this principle, they

COUNTY OF DERBY

Diagram shewing combined Precipitation and Biological sewage Purification Plant



Scale 16 feet to 1 inch.

should be covered over, and the gases coming off from the beds should be passed through a fire. In the cases of villages and groups of isolated houses, if the area of the bacteria beds is increased, this precaution is not necessary.

I have modified the sketch plan published in 1896 in such a way that the scheme can be used either for the bacteriological process alone, or for the precipitation and biological filtration.

Each year the number of District Councils carrying out schemes of purification by their own officers is increasing, and I have reason to know that the last report upon this subject was of considerable use to those who are dealing with the sewage problem in the county. The modifications now suggested are such that the tank may be used as a precipitation tank, or as a bacteria bed.

The sewage is delivered at the outfall works through the sewer shown on the left of the diagram; it passes through the detritus tank A, in which cinders, road silt, and other coarse, heavy suspended matter sinks: it then passes under the scum board B, a board dipping four inches below the surface of the sewage, and arresting corks, lumps of fat, and other floating matters, which are removed by brushing the board daily. If experience proves that the sewage is not suitable for a biological process of purification alone, a chemical, such as alumino ferric, can be suspended in the cage shown.

The tank shown at D will serve either as a precipitation tank or by filling the top two feet with pieces of coke about the size of an orange, suspended in a wire cage, it may serve as a bacteria bed, or a modified septic tank. It has this advantage over the Exeter Septic Tank, viz., that if the sludge accumulates, instead of digesting, it can be removed by means of an ordinary suction pump, without first emptying the tank. The sewage passes down the central inlet, then round the distributors, and upwards through the coke.

The sewage then passes through a bacteria bed. This, when the subsoil is clay, need only consist of a hole in the ground, fitted with broken pots, clinker, coarse coke, etc. At F, where the sewage enters the bacteria bed, the material should be small, say pieces an inch in size, resting on pieces three inches in size, which, in turn, rest on pieces eight inches in diameter; it is at this last point where the actual work of digestion or bacteriolysis commences. The reason for suggesting that the entrance to the bacteria bed should be of small material is that, should plugging take place, the stoppage being near the surface, it is easily remedied. The sewage then filters laterally through six inch, four inch, and two inch material, and by the time it overflows at the outlet of the bacteria bed, solid matters, other than mineral, are completely digested. The amount of

purification effected is shown on page 22, being the difference between the organic matter in the tank effluent, and that in the roughing filter, at Chesterfield, the amount of purification effected may be roughly taken at 50 per cent. The effluent, however, still requires to be oxydised, and the nitrogenous organic matter converted into nitrates; this is best done by distributing the tank effluent by sprinklers over the surface of a coal filter. For small villages the sprinkler can be automatically and intermittently fed by means of a tippler, for larger schemes an automatic flushing tank will be required, while for towns, the best arrangement which your medical officer is acquainted with is a Shone's Ejector, as used at Chesterfield.

LOANS FOR SANITARY AND PUBLIC IMPROVEMENTS.

Owing to the Report of the Local Government Board for 1897 being published earlier than usual, the Loans for 1897 were included in last year's report. In order to make the list of Local Government Board Loans complete, this year I record the Loans for the year ending December 31st, 1896.

URBAN DISTRICTS.

Name of Urban District Council.	Purpose.	Period in Years.	Amount. £
Ashbourne ...	Repayment of Loans ...	32 ...	2,167
Do. ...	Water Supply... ..	30 ...	6,300
Do. ...	Do.	15 ...	1,200
Bolsover ...	Public Lighting	10 ...	300
Buxton ..	Gas	15 ...	2,639
Do. ...	Pleasure Ground	17 ...	1,500
Do. ...	Refuse Destructor	20 ...	500
Do. .	Stables	28 ...	800
Do. ...	Waterworks	30 ...	8,745
Chesterfield ...	Sewage disposal	30 ...	1,200
Dronfield ...	Sewerage and Sewage disposal	32 ...	6,400
Fairfield ...	Sewerage	30 ...	308
Long Eaton...	Bridge	30 ...	80
Do. ...	Sewage disposal	18 ...	300
Do. ...	Sewerage	30 ...	38
Do. ...	Street improvement	13 ...	300
Do. ...	Water supply	30 ...	400
New Mills ...	Gas	21 ...	905
Do. ...	Sewerage and sewage disposal	30 ...	16,532
Swadlincote ...	Private street improvement...	7 ...	1,000
Do. ...	Repayment of Loan	30 ...	2,392
Do. ...	Water supply	30 ...	14,285
Do. ...	Do.	15 ...	3,240

RURAL DISTRICTS.

Rural District.	Contributory Place.	Purpose.	Period in Years.		Amount. £
Bakewell ...	Chelmorton	Water supply	...	30	316
Easford ...	Codnor, Codnor-	Hospital ...	...	15	150
Do. ...	cum-Loscoe, and Shipley.		...	25	80
Belper ..	Duffield ...	Water supply	...	30	200
Do. ...	South Wingfield...	Do.	...	5	105
Blackwell...	Pleasley ...	Sewerage and sewage disposal	...	30	8,538
Do. ...	Scarcliffe ...	Do.	...	30	1,100
Do. ...	Do. ...	Land for sewage disposal	...	50	200
Glossop Dale	Ludworth	Sewerage and sewage disposal	...	30	5,600

ALLOTMENTS ACT, 1890 AND 1897.

Name of Urban District Council.	Period in Years.		Amount. £
Alvaston and Boulton	...	10	150

BYE-LAWS AND REGULATIONS.

During 1896 the following Bye-Laws were sanctioned by the Local Government Board :—

South Darley Nuisances :—

Prevention of nuisances arising from snow, filth, dust, ashes, and rubbish, and prevention of the keeping of animals on any premises so as to be injurious to health.

Clay Cross ... Streets and Buildings :—

Construction of and heights of same, drainage of same, water closets, &c., water supply to buildings, closing buildings unfit for human habitation, paving yards, laying out new streets, depositing plans and notices to construct new streets and buildings, &c., &c., &c.

Chesterfield ... Hackney Carriages :—

Regulation of the conduct of proprietors and drivers. Drivers to wear distinctive badges, carriages to be numbered. Regulating number of persons to be carried, and horses or other animals to draw the same ; placing check strings to the carriages, and how they are to be furnished. Fixing the stands of such carriages, and distance they may be compelled to take passengers. Fixing fares to be paid, and securing publication of them. Securing the safe custody and re-delivery of property accidentally left in carriages, and fixing the charges to be made in respect thereof.

Buxton ... Cemeteries :—

Management of Cemeteries, and charges for their use.

PART II.

THE DISTRICTS SEPARATELY.

URBAN SANITARY DISTRICTS.

ALFRETON.

Medical Officer of Health, E. GAYLOR, L.R.C.P.E.

Area in Acres, 4,626. Estimated Population, 17,700.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
16·15	33·55	·90	185·1

Action taken with regard to Infectious Disease. During the year, 76 cases of Scarlet Fever, 5 of Diphtheria, and 12 of Typhoid Fever were reported. Dr. Gaylor again asks the Council to make proper arrangements for the efficient disinfection of houses after cases of infectious disease; he suggests that Inspector Spencer should be able to obtain the assistance of one of the labourers in the employ of the Council, so that every house in which infectious disease occurs can be thoroughly disinfected. It is quite impossible for this work to be done unless the Inspector receives the assistance which Dr. Gaylor recommends he should have. For the disinfection to be thorough, in many instances it means that the walls should be stripped of the paper, a tedious process, and one which will not be properly carried out unless it is done by an officer of the Council. Dr. Gaylor also recommends that large canvas bags should be purchased, in order that bedding may be taken to the Isolation Hospital for disinfection. The full benefit of the Belper Isolation Hospital will not be obtained until these arrangements are carried out.

Scavenging. Dr. Gaylor again calls the attention of the District Council to the necessity for scavenging the whole of the district. During the year, 3,410 loads of night soil were removed in Alferton ward alone, and, as Dr. Gaylor points out, if this is necessary in Alferton ward, why not in the rest of the district? It is frequently objected to scavenging being carried out on account of the increase it necessitates to the rates; but the actual money spent is no greater, whether each individual pays for his own scavenging separately, or pays for it in the form

of a rate ; while, where public scavenging is adopted, the public at large benefit, because anything which lessens such diseases as Typhoid Fever is an advantage to the whole district. The Medical Officer states that most of the ash-pits in the district are too large, and as they are not supposed to require emptying until they are full, the refuse is allowed to accumulate and remain in close proximity to the dwellings for a much longer time than ought to be the case.

General Sanitation. The Medical Officer again asks the Council to adopt a Bye-Law dealing with the question of pig keeping, and suggests that pigs should not be allowed to be kept closer to a dwelling than 16 yards. This distance certainly does not err on the side of stringency, and should only be allowed when the pig sty is provided with an impervious floor, and with a proper drainage. The number of pig sties within the district is 1,090.

Now that there is no question about the district being able to obtain an adequate supply of water, water closets should be adopted in all new property, and where any privy is in such a state as to be a nuisance, the nuisance should be abated by the conversion of the privy midden into a water closet.

Sewage Disposal.—The precipitation tanks are working fairly satisfactorily, but as the land is of such a stiff character, the District Council is still, I regret to say, offending under the Rivers Pollution Prevention Act. Fortunately, however, the remedy is not an expensive matter to effect, as it merely consists of digging holes in the ground at the various outfalls, and constructing filters by filling in with washed coal free from dust, as described in the Annual Report for 1896. Before doing this, the District Council would be well advised in inspecting the coal filter constructed at Chesterfield.

Further Sanitary Requirements. As mentioned in the reports of 1896 and 1897. (i.) Scavenging of the *whole* district. (ii.) The disinfection of all premises after infectious disease by an Officer of the Council. (iii.) The construction of proper biological filters of coal at the sewage disposal works. (iv.) The adoption of Bye-Laws regulating the keeping of pigs. (v.) The adoption of the water carriage system. (vi.) The adoption of the Infectious Diseases Prevention Act, 1890.

ALVASTON AND BOULTON.

Medical Officer of Health, W. H. WRIGHT, M.R.C.S.

Area in Acres, 2,155. Estimated Population, 4,250.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
11·76.	32·23.	1·88.	91·8.

Action taken with regard to Infectious Disease. During the year 15 cases of Scarlet Fever and 1 of Diphtheria were reported.

The Medical Officer continues to examine the schools once a month, but from the report it appears that the houses in which infectious disease have occurred are not disinfected by the inspector.

General Sanitation. No information is given upon the important question of the scavenging of the district. The district is within the limits of the Derby Corporation Water Supply, and as soon as the new Derwent water is brought to the Borough the mains should be extended so as to supply this district.

Further Sanitary Requirements. (i.) The extension of the Derby Water Mains. (ii.) A system of sewerage and sewage disposal. (iii.) A system of public scavenging of the district. (iv.) The disinfection of houses by the Inspector after infectious disease.

ASHBOURNE.

Medical Officer of Health, P. R. LITTLETON, M.R.C.S.

Area in Acres, 572. Estimated Population, 4,000.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
23·0.	30·50.	5·75.	204·9.

Action taken with regard to Infectious Disease. Three cases of Scarlet Fever, four of Diphtheria, and one of Typhoid Fever were reported during the year. As there are more than 100 cottages with only one bedroom the necessity for an Isolation Hospital must be apparent.*

General Sanitation. A great improvement has been effected in the district by the adoption of a public water supply. In the dry season, Dr. Littleton suggests more water should be used for flushing drains and sewers; to this I would add—"and the surfaces of common yards."

Further Sanitary Requirements. (i.) A system of sewerage and sewage disposal. (ii.) An Isolation Hospital and Disinfectory. (iii.) A scheme for the better housing of the working classes. (iv.) The adoption of the Infectious Diseases Prevention Act, 1890.

BAKEWELL.

Medical Officer of Health, C. W. EVANS, M.B.

Area in Acres, 3,064. Estimated Population, 2,900.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
17 24.	23·10	·68.	119·4.

Action taken with regard to Infectious Disease. Five cases of Scarlet Fever, two of Diphtheria, and six of Typhoid were reported

* The high zymotic death-rate is attributable to the fact that there were 10 deaths from Measles and eight from Whooping-cough during the year.

during the year. Two of the cases of Scarlet Fever were removed to the temporary hospital. The proper isolation of cases of infectious disease cannot take place, however, until the district is provided with a permanent isolation hospital suitable for the isolation of cases of infectious disease during the winter months.

General Sanitation. It is satisfactory to read that at last measures have been taken to obtain a site for an additional reservoir at a higher level than the existing one, so that the higher parts of the town, which are at present without water during certain hours of the day, can obtain a continuous supply. The conversion of privies to water closets is gradually proceeding, fifteen having been converted during the year. Dr. Evans properly points out that now the model bye-laws of the Local Government Board have been adopted, these should be insisted on in the case of every new house. Nothing is said regarding a system of sewage disposal.

Further Sanitary Requirements. (i.) A system of sewerage and sewage disposal. As was pointed out in the report for last year, a biological system of purification on the Exeter septic tank system, or some modification of it, is indicated in this district.

BASLOW AND BUBNELL.

Medical Officer of Health, P. S. FENTEM, M.D.

Area in Acres, 5,635. Estimated Population, 890.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
13·48.	12·35.	—	90·9.

Action taken with regard to Infectious Disease. No cases of infectious disease were reported during the year. Dr. Fentem advises the District Council to carry out the scavenging of the district themselves. He also writes:—"A properly-constructed drainage scheme is for all places an absolute necessity: especially is this so in a health resort. The present method of disposal of some of the sewage of your district is not only unsightly and unlawful, but most unhealthy."

Further Sanitary Requirements. (i.) A system of sewage disposal. Some modification of the Exeter process, such as that described on pages 22 to 24, would prove sufficient.

BELPER.

Medical Officer of Health, R. G. ALLEN, M.R.C.S.

Area in Acres, 3,183. Estimated Population, 11,100.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
20·00.	33·06.	1·71.	168·9.

Action taken with regard to Infectious Disease. One hundred and one cases of Scarlet Fever and 9 of Typhoid were reported

during the year. Dr. Allen writes: "The Isolation Hospital will prove a grand acquisition in dealing with outbreaks of infectious disease." The number of houses said to have been disinfected is 17; this must leave room for a large leakage whereby further outbreaks of infectious disease will be caused. Now that the Isolation Hospital is open, canvas bags should be purchased, in which bedding, clothing, etc., can be sent to the steam disinfectory, and at the same time all houses should be disinfected by means of the Corrosive Sublimate Spray, or an Alformant Lamp; until these precautions are taken the ratepayers of the district will not obtain the full value for the money they have invested in the Belper Isolation Hospital.

General Sanitation. The plans for the disposal of the sewage of the district have been examined by the Committee, and by an independent expert, with the result that the various schemes have been weeded down to two, which are now under consideration. The Medical Officer of Health states that complaints have been made of the nuisance caused by the old-fashioned privy middens; doubtless these will be replaced by water-closets now that the district has been provided with an adequate water supply. Another good result from the district having obtained its present excellent water supply is that Public Baths can be provided, and there will be no more of the complaints which have arisen through the absence in the past of street watering during the summer months. It cannot be too clearly understood that street watering in the hot weather has a beneficial result in preventing the blowing about of dust and filth, but also, by lowering the temperature of the ground, prevents one of the conditions which is necessary for the development of the organism which causes Autumnal Diarrhœa.

Further Sanitary Requirements. (i.) A sewerage and sewage disposal scheme. (ii.) The substitution of water closets for privies. (iii.) The systematic disinfection of houses, bedding, etc., after cases of infectious disease. (iv.) The adoption of the Infectious Diseases Prevention Act, 1890.

BOLSOVER.

Medical Officer of Health, T. W. COLE, M.B.

Area in Acres, 4,955. Estimated Population, 5,550.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
18·73.	51·53.	3·06.	178·3.

Action taken with regard to Infectious Disease. Twenty-three cases of Scarlet Fever, 3 of Diphtheria, and 10 of Typhoid Fever were reported during the year. There was also an outbreak of Autumnal Diarrhœa, which was responsible for

many deaths among young children. The disinfection of houses after infectious disease is not carried out by the servants of the District Council.

General Sanitation. The scavenging of the district is not yet carried out by the servants of the Council, nor has a system of sewage disposal been carried through; both these matters are urgently required, and ought to be carried out without any further delay. Nothing has been done to obtain for the district a public water supply. The proper method of doing this would be for Bolsover to be joined with the Chesterfield Rural District, and the Chesterfield Gas and Water Board into a Rother Valley Water Board, to supply the whole of the district with water either from their own sources, or from the Sheffield mains.

Further Sanitary Requirements. The same as were mentioned in the Annual Report for last year, viz.:—(i.) The provision of a proper water supply. (ii.) A scheme of sewerage and sewage disposal. (iii.) Public scavenging. (iv.) The conversion of pail closets and privy middens into water closets. (v.) The adoption of the Infectious Diseases Prevention Act, 1890.

BONSALL.

Medical Officer of Health, J. C. INNES, L.R.C.S.

Area in Acres, 2,447. Estimated Population, 1,350.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
14·07.	34·81.	—	42·5.

In this small district there are a large number of minor nuisances. The District Council have done well in adopting a Bye-Law dealing effectively with the nuisance arising from the keeping of pigs. Having adopted this Bye-Law, the District Council should see that it is enforced by giving a general instruction to their Medical Officer and Inspector to take proceedings where it is not complied with. The great advantage of having a Bye-Law dealing with this question is that the individual members of the Council cannot be laid open to the charge of exercising favour, as it is a simple question of fact whether in any given case the Bye-Law is, or is not, complied with.

Further Sanitary Requirements. (i.) The enforcement of the Bye-Laws of the district. (ii.) A system of sewerage and sewage disposal. (iii.) A public water supply.

BRAMPTON AND WALTON.

Medical Officer of Health, J. A. GOODFELLOW, M.B.

Area in Acres, 10,102. Estimated Population, 2,700.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
10·37.	23·33.	·37.	63·4.

Action taken with regard to Infectious Disease. Thirty cases of

Scarlet Fever and one of Diphtheria were reported during the year. Twenty-one of the cases of Scarlatina were children at the Industrial School. As soon as arrangements are made for the admission of cases of infectious disease into the Chesterfield Joint Hospital, the work of the disinfection of infected houses should be carried out by an officer of the District Council.

General Sanitation. It appears that the District Council have had plans prepared for the construction of modern sewage purification works at Holymoore Side, but the cost of the proposed scheme was £850; the District Council thought this unreasonable, and have, therefore, constructed a simple kind of biological filter. Unfortunately, this filter is not properly ventilated, and no arrangements have been made for its intermittent aeration. The District Council should pay a visit to the Chesterfield biological filters, as possibly by a dual system of filtration, first of all through a bacterial bed, upon the continuous-flow principle, and, secondly, by intermittent filtration through coal, the necessity for the construction of a precipitation tank might be dispensed with. A recent sample of the effluent from the works proves that what has been done up to the present is absolutely insufficient.

It is satisfactory to read that at last arrangements have been made with the Chesterfield Gas and Water Board for the supplying of Walton with water, and Dr. Goodfellow points out the necessity for the Board supplying Old Walton, where he found five water supplies out of seven were contaminated.

Further Sanitary Requirements. (i.) The improvement of the water supply and sewage disposal works, as mentioned above. (ii.) The adoption of the Infectious Diseases Prevention Act, 1890.

BUXTON.

Medical Officer of Health, FREDK. TURNER, M.R.C.S.

Area in Acres, 1,189. Estimated Population, 8,900.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
14·83.	24·71.	1·57.	150·0.

Action taken with regard to Infectious Disease. Sixty-four cases of Scarlet Fever and four of Typhoid were reported during the year. Twenty-eight of the cases were removed to the Isolation Hospital. There is no doubt that the Isolation Hospital has again proved its value to the district; it appears, however, that a proper ambulance is still a desideratum.

General Sanitation. Beyond absolutely proving that coal is the best medium for nitrifying the Buxton sewage, nothing further has been done towards the construction of Biological Filters. If the District Council constructed a sufficient area of coal filter it would find itself in the strongest position of

any Authority I am aware of with regard to this question, and having set such an excellent example it would be in a better position with the Local Government Board, and other Authorities, in dealing with other questions of local administration. The capacity of the storage reservoirs is now equal to 35,000,000 gallons. Dr. Turner very properly points out that if Buxton is to maintain its high place amongst the health resorts of Europe, the District Council should take into consideration every means that can be taken to combat the infectivity of tuberculosis. Buxton, from its elevation and its position geologically on the mountain limestone, is well situated for the modern treatment of consumption. Amongst the means which should be taken, a public abattoir is undoubtedly the first. The stringent enforcement of the building bye-laws is strongly advocated.

Further Sanitary Requirements. (i.) The construction of sewage filters. (ii.) The enforcement of building bye-laws. (iii.) The provision of a public abattoir. (iv.) The provision of a modern ambulance. (v.) The registration of common lodging-houses.

CHESTERFIELD.

Medical Officer of Health, H. M. RICHARDS, M.D., D.P.H.

Area in Acres, 1,219. Estimated Population, 25,000.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
24.64.	35.60.	3.68.	231.4.

Action taken with regard to Infectious Disease. One hundred and twenty-one cases of Scarlet Fever, five of Diphtheria, and forty-seven of Typhoid Fever were reported during the year. With reference to the Typhoid Fever, Dr. Richards writes :—“The further experience gained in 1898 confirms me in the opinion expressed in my last report, that Endemic Typhoid in Chesterfield is due to pollution and infection of soil in the neighbourhood of dwellings. This befoulment is mainly brought about by the execrable privy-midden system, which finds such favour in the minds of the less enlightened members of the community.”

The number of articles disinfected by steam was 1,640, while 119 houses were disinfected by the corrosive sublimate spray or sulphur.

An excellent arrangement has been made with the School Board, whereby absentees alleged to be suffering from infectious disease are notified to the Medical Officer of Health. The homes of the children are visited, and the parents advised on preventing the spread of disease. In this way the people are gradually being educated to take reasonable precaution against these common diseases. To show the advantage of carrying

out some such arrangement as this, the following is a list of cases notified by the School Board during the year:—

Scarlet Fever	...	...	...	...	...	12
Measles	...	...	...	...	...	366
Whooping Cough	...	...	...	...	...	35
Chicken Pox	...	...	...	...	...	5
Typhoid Fever	...	...	...	...	...	2
Mumps	...	...	...	...	...	5
Ring Worm, &c.	...	...	...	...	...	32

With regard to the cases of Measles, only 18 deaths occurred out of the 366 cases. This small proportion is probably due to the advice given through the Health Department. Amongst the poor, Measles is an extremely fatal disease, simply because a few elementary precautions are not taken.

General Sanitation. The work of converting privy middens to water-closets must necessarily remain in abeyance until the Gas and Water Board have provided the district with an adequate supply of water.

At last the Corporation have ascertained how to produce an effluent which complies with the requirements of the County Council. No time should now be lost in extending the filters, so as to deal with the whole of the sewage.

Dr. Richards presents with his report a special exhaustive report upon the disposal of the refuse of Chesterfield.*

All the common lodging-houses have been visited during the year. A third conviction was obtained against one of the keepers, and his name was therefore erased from the register. Four lodging-houses have, for various reasons, been removed from the register.

The dairies and cowsheds are gradually being improved. One cowshed was closed after notice to put it into a sanitary condition.

Further Sanitary Requirements. (i.) An increased water supply, and the filtration of the present supply. (ii.) The conversion of privy middens to water closets. (iii.) Paving of backyards. (iv.) Construction of a sufficient number of sewage filters. (v.) The erection of a refuse destructor.

CLAY CROSS.

Medical Officer of Health, WM. DUNCAN, M.B., C.M.

Area in Acres, 1,462. Estimated Population, 9,000.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
18.22.	31.55.	2.22.	207.7.

Action taken with regard to Infectious Disease. As the Notification of Infectious Diseases Act is not in force in the district, it

* I am glad to record that since the report was written the Town Council have applied to the Local Government Board for sanction to a loan of £1,600 to erect a refuse destructor.

is impossible to correctly give the number of cases of infectious disease, but over one hundred cases of Scarlet Fever and twenty-eight of Typhoid Fever came to the knowledge of the Medical Officer of Health. It is equally impossible for the officials of the District Council to take the necessary measures to prevent the spread of infectious disease when they do not know the houses in which cases of infectious disease exist. Fortunately, the Infectious Diseases Notification Act will become compulsory in 1900.

General Sanitation. Dr. Duncan points out that the scavenging would be carried out much better if the work were done by the servants of the District Council; he also points out the extremely insanitary condition of many of the backyards, owing to their being without any system of paving; the result is that the soil becomes sodden with filth, and the yards reek with disease. It was pointed out in the report of last year how the bacillus of Typhoid Fever flourishes in a filth-sodden soil, and gains access to the habitations in the ground air, or is blown in the dry weather along with dust, settling upon milk and other articles of diet in which it can propagate itself. The cases of Typhoid Fever which occurred are attributed, and from my own knowledge of the district I should say rightly attributed, to the unpaved yards and the foul condition of the privy middens. One of the Common Lodging Houses is reported as being in an unsatisfactory condition, and another contains beds in excess of those allowed by the Bye-laws. The District Council should stop this at once.

Sewage Disposal. Nothing has yet been done to remedy the condition of affairs upon the sewage farms, and this Authority is grossly offending against the Rivers Pollution Prevention Act.

Further Sanitary Requirements. (i.) The improvement of the Sewage Disposal Works. (ii.) The conversion of privy middens to water closets. (iii.) The paving of backyards. (iv.) An increased water supply of unimpeachable character. This the district will be able to obtain from the Derwent Scheme.

DRONFIELD.

Medical Officer of Health, H. M. RICHARDS, M.D., D.P.H.

Area in Acres, 1,046. Estimated Population, 4,100.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
14.63.	21.75.	1.21.	155.7.

Action taken with regard to Infectious Disease. Fifteen cases of Scarlet Fever and four of Diphtheria were reported during the year. Dr. Richards writes:—"Dronfield is to be con-

gratulated on the fact that one of the hospitals will be situated at a convenient spot within the parish. Every facility will therefore be shortly afforded for the isolation of infectious patients."

General Sanitation. There is still great scarcity of water in this district; it is to be hoped that the Chesterfield Rural District Council will press on with the construction of the large reservoir they have in hand. The scavenging of the district is left to the individual householders, with the consequence that nuisances from privy middens and accumulations of refuse are inevitable. Now that, as the consequence of the Derwent Valley Water Bill, the district is ensured an adequate supply of water for all time, and the District Council have provided their district with a proper system of sewerage and sewage disposal, the work of the conversion of privies to water closets should be taken in hand. The District Council should arrange with their Medical Officer of Health to analyse the effluent from their sewage works at least twice a month.

Further Sanitary Requirements. (i.) A system of public scavenging. (ii.) The substitution of water closets for privy middens. (iii.) The paving of backyards. (iv.) Increased water supply.

FAIRFIELD.

Medical Officer of Health, C. J. BENNET, M.R.C.S.

Area in Acres, 3,445. Estimated Population, 2,600.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
18·84.	41·53.	·38.	148·1.

Action taken with regard to Infectious Disease. During the year there were 16 cases of Scarlet Fever. The houses were all disinfected by the Inspector.

General Sanitation. Nothing has yet been done to purify the sewage of Town End. Dr. Bennet suggests that an engineer should be consulted upon the advisability of adopting a conical-bottomed precipitation tank. No improvements have been made in the paving of back yards, with the result that garbage and other filth soaks into the ground close to the dwellings, contaminating the ground air. "The mode of scavenging," Dr. Bennet writes, "might be done in a much more sanitary manner if the contents of the closets and ash-pits, when being emptied, were at once placed in a cart and removed to a safe distance, instead of, as at present, being thrown on the ground near the houses, often remaining there for some considerable time, polluting both the ground and the atmosphere. This work might also be done in the early

morning, and so lessen the nuisance as much as possible." The means of increasing the water supply has received attention during the year.

Further Sanitary Requirements. (i.) The carrying out of a small sewage scheme. (ii.) The supplementing of the water supply. (iii.) The paving of backyards. (iv.) The adoption of the Infectious Diseases Prevention Act, 1890.

GLOSSOP.

Medical Officer of Health, D. J. MACKENZIE, M.D.

Area in Acres, 3,050. Estimated Population, 23,400.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
18·63.	24·78.	2·43.	179·3.

Action taken with regard to Infectious Disease. Two hundred and forty-nine cases of Scarlet Fever, fifteen of Diphtheria, and eighty-four of Typhoid Fever were reported during the year. Forty-three of the cases of Scarlet Fever and twenty of the cases of Typhoid were removed to the Isolation Hospital, and by these means the Scarlet Fever was limited to a great extent, but it is clear that larger hospital accommodation is required. The Corporation should take into consideration the advisability of making an application to the County Council, under the Isolation Hospitals Act, to enable them to obtain a grant with the object of extending the present hospital. The Health Committee of the Corporation of Chesterfield have already been made into a Hospital Committee with this object.

At the end of the year a serious outbreak of Typhoid Fever arose, but no common water supply or milk supply could be found associated with the outbreak. Where the cases occurred, the backyards were, as a rule, unpaved, and there was either a pail closet or a privy midden, with the inevitable result of contamination of the ground with fæcal matter, close to the dwellings. Dr. Mackenzie comes to the same conclusion with regard to this outbreak as Dr. Richards came to in regard to the outbreak at Chesterfield the year before. Each year evidence accumulates of the danger of privy middens, and there can be no doubt of the soundness of Dr. Mackenzie's advice that the Corporation should adopt the water-carriage system; this is more especially the case now that the Corporation have carried out an efficient sewerage system.

General Sanitation. There is great need of the paving of backyards in this district. The water supply at Hadfield requires filtering: that to the rest of the borough is barely sufficient. The work of converting privy middens to water closets should be taken in hand at once. It is stated that three samples of the public water supply were submitted to the Borough Analyst, and that he reported favourably on all the

samples. It cannot be too clearly stated that, in addition to submitting samples for analysis, the source of the water should always be inspected.

Further Sanitary Requirements. (i.) The substitution of water closets for privy middens. (ii.) The extension of the Isolation Hospital. (iii.) The procuring of additional sources of water supply.

HEAGE.

Medical Officer of Health, G. GARNHAM, M.R.C.S.

Area in Acres, 2,367. Estimated Population, 2,800.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
10·00.	39·64.	·71.	108·1.

Action taken with regard to Infectious Disease. Three cases of Scarlatina and two of Typhoid were reported during the year.

General Sanitation. The water supply of the district is quite insufficient, but an adequate supply will be obtained when the Derwent Valley Scheme is carried out. At Ambergate a sewerage scheme is urgently required.

Further Sanitary Requirements. (i.) A sewerage scheme for Ambergate. (ii.) An additional water supply. (iii.) The disinfection of all houses after infectious disease by a servant of the Council. (iv.) The adoption of the Infectious Diseases Prevention Act, 1890.

HEANOR.

Medical Officer of Health, W. H. TURTON, M.D.

Area in Acres, 1,579. Estimated Population, 11,500.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
16·00.	36·86.	3·38.	165·0.

Action taken with regard to Infectious Disease. Eighty-three cases of Scarlet Fever, 20 of Diphtheria, and 27 of Typhoid Fever were reported during the year. In all the cases of Typhoid a Typhoid excreta pail, containing a disinfectant, was immediately sent, and the excreta (disinfected) was collected each day and buried at a suitable place by one of the workmen of the District Council. In most of the cases of Scarlet Fever, too, the disinfection of the house, after the infection was over, was carried out by the servants of the Board. Dr. Turton points out the necessity which exists for a proper Isolation Hospital.

General Sanitation. At present the water supply to the district is only laid on for a few hours on Wednesdays and Saturdays; the new scheme may enable the district to tide over the period until the Derwent water is brought down as far as Ambergate,

then a joint scheme for Ripley, Heanor, Ilkeston, and the adjoining district should be carried out. The scavenging is said to be done better, but there is still room for improvement. The construction of the sewage disposal works is proceeding satisfactorily.

Further Sanitary Requirements (i.) The adoption of a code of Building Bye-laws. (ii.) The construction of biological filters on each of the sewage disposal sites, and a scheme for Codnor and Loscoe. (iii.) An improved water supply. (iv.) The provision of an Isolation Hospital in conjunction with the Corporation of Ilkeston.

ILKESTON.

Medical Officer of Health, J. G. WILLIS, L.R.C.P.E.

Area in Acres, 2,562. Estimated Population, 25,800.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
18·51.	36·98.	2·20.	194·9.

Action taken with regard to Infectious Disease. Nineteen cases of Scarlet Fever, 12 of Diphtheria, and 115 of Typhoid Fever were reported during the year. With regard to the Typhoid Fever, Dr. Willis records that—"On the notification of a case, the Sanitary Inspector supplied a typhoid pail and disinfectants; 78 houses were disinfected. All the streets, especially in the infected area, were watered frequently with disinfectants. I may state at the outset that any common specific cause cannot be found, but that the prevalence was attributable rather to a variety of causes. The borough has never been free from Enteric Fever for years past; the typhoid bacillus is always with us. The greatest incidence was in the Central Ward especially, as has been seen, in Lower Blooms Grove Road, Springfield Terrace, and Belvoir Street. With regard to Lower Blooms Grove Road and Springfield Terrace, which are practically the same block of houses, the disease commenced with a child, and ran through the house, attacking seven out of the eight inmates. They were not all attacked simultaneously, several weeks elapsing between the first and last case. One or two of the younger children, in the early stage of the disease, before they were confined to bed, made a passage their place of convenience. This passage was used by most of the occupiers of the houses in Lower Blooms Grove Road and Springfield Terrace. The weather was excessively hot at the time, these highly infectious typhoid discharges were dried by the sun, and the particles agitated in the atmosphere by the wind. It was a case of the survival of the fittest to all those who were unfortunate enough to swallow any of these particles. The result was that over 20 cases occurred in the immediate neighbourhood. Of

course, these cases would not have occurred if there had not been a first case to infect them, and it is not always easy to discover the origin of these first cases."

General Sanitation. The scavenging of the district is carried out at the expense of the property owners. Now that the borough of Ilkeston has become such a large and important district, it is time that this important work should be taken in hand by the Corporation, a special staff being appointed to do the work. The provision of a refuse destructor is also urgently needed. The destructor should be erected upon the present sewage farm, the heat from the burning of the refuse being utilized for compressing air to apply the sewage over the filters (as at Chesterfield), and the clinker being used to construct the filters of. In this way the sewage disposal works can be gradually extended to keep pace with the increase of the population of the district.

Further Sanitary Requirements. (i.) An improved water supply. This can only be provided on a proper scale from the Derwent Water Scheme. The Corporation, however, would be well advised in making arrangements for the purchase, for the next ten years, of the shaft water from one of the collieries in the district, to enable them to dispense with the use of the Stanley Brook water at once. (ii.) The construction of biological filters of coal at each of the sewage disposal works. (iii.) The provision of a refuse destructor, and the organization of a proper system of scavenging. (iv.) The formation of an Isolation Hospital District in conjunction with the Heanor urban district.

LONG EATON.

Medical Officer of Health, A. B. CHAMBERS, M.D.

Area in Acres, 2,099. Estimated Population, 12,400.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
11.91.	28.87.	1.85.	131.2.

Action taken with regard to Infectious Disease. Eighty cases of Scarlet Fever, 17 of Diphtheria, and 16 of Typhoid Fever were reported during the year. Dr. Chambers points out that it is impossible to cope with epidemics, such as that of Scarlet Fever, until the Isolation Hospital is started. About half the cases of Typhoid were due to drinking polluted water; in each case the Medical Officer examined the water, and caused the wells to be closed.

General Sanitation. There are now 2,200 houses in the town taking the public water supply, and 276 supplied from surface wells, while twelve months before the number of surface wells was 421. Experiments have been made with regard to filtering

the sewage of Long Eaton. An experimental filter of coal and sand produced 140 lbs. of nitrates from every 100,000 galls. of sewage applied to the filter: it is extremely probable that, had greater care been taken in the construction of the coal filter, even a larger amount of nitrate would have been produced.

Further Sanitary Requirements. (i.) The conversion of all insanitary privy ashpits to water closets. (ii.) The adoption of water closets at all new houses. (iii.) The construction of a biological filter of coal. The District Council would be well advised in inspecting the new Chesterfield filter before proceeding with the actual construction of their filter. (iv.) The registration of dairies, milk-shops, and cowsheds.

MATLOCK.

Medical Officer of Health, WM. MOXON, M.D.

Area in Acres, 4,203.

Estimated Population, 5,900.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
17·28.	27·45.	1·18.	135·8.

Action taken with regard to Infectious Disease. One death occurred from Diphtheria, but, as the Notification Act is not in force, it is impossible to say the number of cases which existed in the district and were unknown to the authorities. With regard to the means of isolating cases of infectious disease, the Medical Officer's sanguine expectations of last year have not been fulfilled; but it is hoped that at least a first instalment, by providing one ward pavilion, will be agreed to without delay by the Haddon Hospital Committee.

General Sanitation. During the year the District Council acquired the present Water Works, and obtained an Act of Parliament authorising them to carry out a further scheme. If arrangements could be made whereby the district could carry on for a few years, the Derwent Valley Scheme would be available for the greater part of the district, while the present works could be utilized for the higher portions of the district. A joint scheme for the disposal of the sewage of this district and that of Matlock Bath was also prepared, but, as there is no doubt that an efficient scheme of purification could be carried out for both districts upon the six acres of land to the east side of the Midland Railway line near Cromford Meadows, it is not a matter of regret that the Parliamentary Committee would not pass the arrangement proposed by the District Council.

The scavenging of the district is now being done by the servants of the District Council, and has resulted in the much greater cleanliness of the district, and great convenience to the

inhabitants. Dr. Moxon writes: "I still think the provision of an abattoir an important matter in a health resort like Matlock. Every slaughter-house is more or less of a nuisance to its immediate neighbourhood, and the desirability of concentrating all nuisances, as far as possible, needs no advocacy from me." Apart from this aspect of the question, if an abattoir were provided, all the meat used in the district could, as a matter of routine, be inspected by the Medical Officer, and the visitors to the district be ensured against the consumption of tubercular meat.

Further Sanitary Requirements. (i.) A joint scheme for the disposal of the sewage of Matlock and Matlock Bath. (ii.) An additional water supply. (iii.) The provision of a public abattoir.

MATLOCK BATH.

Medical Officer of Health, GEO. HARVEY, L.R.C.P.

Area in Acres, 337. Estimated Population, 1,960.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
17·85.	22·44.	1·02.	159·0.

Action taken with regard to Infectious Disease. Ten cases of Scarlet Fever, one of Diphtheria, and one of Typhoid were reported during the year. Each case was visited, instructions given as to the precautions to be taken, and disinfectants were left.

General Sanitation. A house to house inspection of Scarthin Nick has been made. Yards have been paved, and privy middens have been converted to water closets. The water supply of the district is said to be adequate.

Further Sanitary Requirements. (i.) A system of sewerage and sewage disposal. To avoid the great expense of deep cuttings and tunnelling, the District Council would be well advised in considering the Liernur system at work at Trouville, or the Shone system at work at Wrexham. (ii.) The more general adoption of water closets.

NEWBOLD AND DUNSTON.

Medical Officer of Health, W. S. SYMES, L.K.Q.C.P.I.

Area in Acres, 2,802. Estimated Population, 5,550.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
19·27.	40·00.	5·04.	193·6.

Action taken with regard to Infectious Disease. As many as 209 cases of Scarlet Fever were notified during the

year; there were also two cases of Diphtheria and four of Typhoid Fever. Dr. Symes writes: "Until it is possible to isolate the early cases of Scarlatina, it will be impossible to prevent this disease from spreading." Fortunately, the North Derbyshire Hospital Committee already have the plans of an Isolation Hospital before the Local Government Board.

General Sanitation. There has been a marked improvement of the scavenging of the district since a regular system of emptying the ashpits has been adopted.

Further Sanitary Requirements. (i.) The adoption of the Model Bye-Laws of the Local Government Board. (ii.) The construction of a conical-bottomed tank and biological filters upon the Sewage Farm.

NEW MILLS.

Medical Officer of Health, J. E. ANDERTON, M.R.C.S.

Area in Acres, 5,205. Estimated Population, 6,720.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality
19.94.	29.31.	2.52.	208.1.

Action taken with regard to Infectious Disease. Five cases of Scarlet Fever and one of Diphtheria were reported during the year. The District Council are taking a share in the High Peak Hospital, now in course of construction.

General Sanitation. During the year great progress was made with the sewerage scheme of the district; when completed, the privy middens in the district should be converted to water closets. The District Council has arranged for the purchase of the Water Works, with a view of carrying out a comprehensive scheme; this, probably, could best be done in conjunction with Hayfield, for a deep well to the north of Hayfield would provide enough water for both places. The District Council would be well advised in consulting Professor Boyd Dawkins, who is their consulting geologist, on the exact site on which to sink. Dr. Anderton writes: "I must again refer to the scavenging of the district, and urge the Council to undertake it, for I have little doubt that if the ashpits were emptied oftener it would greatly tend to improve the health of the place."

Further Sanitary Requirements. (i.) Completion of the sewerage and sewage disposal works. (ii.) The procuring of additional sources of water supply. (iii.) The adoption of public scavenging.

NORTH DARLEY.

Medical Officer of Health, WM. MOXON, M.R.C.S.

Area in Acres, 5,142.

Estimated Population, 2,400.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
10·83.	32·08.	·41.	90·9.

Action taken with regard to Infectious Disease. Seven cases of Scarlet Fever and 14 of Typhoid Fever were reported during the year. With regard to the Typhoid Fever, it was thoroughly investigated, but no factor, such as milk or water supply, was found common to them all. The water supply, however, to a large farm which supplied a number of the cases with milk, was found to have been polluted by workmen having defæcated close to the spring. The suspected water, however, did not shew signs of pollution upon chemical analysis.

Further Sanitary Requirements. (i.) The most urgent matter requiring attention is the provision of a water supply for the district. There is no place in Derbyshire which could more easily supply itself with an adequate supply of pure water. In addition to the local springs, however, the mains of the Derwent Valley Water Scheme will pass through the district. (ii.) A sewerage scheme for Upper Hackney is also required. (iii.) The adoption of the Infectious Diseases Prevention Act, 1890.

RIPLEY.

Medical Officer of Health, E. GAYLOR, L.R.C.P.E.

Area in Acres, 2,836.

Estimated Population, 10,300.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
15·24.	33·00.	1·84.	150·0.

Action taken with regard to Infectious Disease. Fifty cases of Scarlet Fever, six cases of Diphtheria, and one of Typhoid Fever were reported during the year. Several of the cases of Diphtheria occurred at farmhouses. Proper precautions were taken to prevent infection, and, fortunately, it was not found necessary to stop the milk supplies. The Belper Isolation Hospital is now ready for the isolation of infectious sickness. The Hospital Committee have erected a steam disinfecter, and arrangements should be made for the disinfection of bedding, and other articles likely to retain infection. At the same time, the District Council should make arrangements for the disinfection of all houses in which cases of infectious disease have occurred. Until the District Council do this they will not obtain the full value for the capital they have sunk in the Belper Isolation Hospital.

General Sanitation. The water supply of the district is, and must be, extremely unsatisfactory. Fortunately, the pipe from Ambergate to Nottingham, taking water from the Derwent Valley Water Scheme, will pass through this district, and the inhabitants will then have an opportunity of procuring at a cheap rate an unlimited supply of the purest water obtainable. Peashill, Waingroves, and Street Lane require sewerage, while on the Sewage Farm a biological filter should be constructed. With regard to the scavenging, Dr. Gaylor states that the whole district is in a much more satisfactory state since public scavenging has been carried out.

Further Sanitary Requirements. (i.) The disinfection of all houses after infectious disease. (ii.) A sewage disposal scheme for Waingroves. (iii.) Conical bottomed tanks and biological filters are required on the Sewage Farms. (iv.) An increased water supply.

SOUTH DARLEY.

Medical Officer of Health, J. L. FLETCHER, M.B.

Area in Acres, 2,007. Estimated Population, 820.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
25.60.	32.92.	3.65.	148.1.

The Medical Officer of this small district again calls attention to the necessity for a proper water supply to Wensley and Darley Bridge.

A small bacteriological sewage disposal scheme for Darley Bridge is also required.

SWADLINCOTE.

Medical Officer of Health, J. HAMILTON, M.D.

Area in Acres, 3,670. Estimated Population, 15,500.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
18.12.	40.70.	2.90.	167.9.

Action taken with regard to Infectious Disease. Seventeen cases of Scarlet Fever, 8 of Diphtheria, and 16 of Typhoid Fever were reported during the year. The most serious point about the returns of this district is the number of cases of Typhoid Fever. The Medical Officer again earnestly urges the District Council to provide a steam disinfector. Now that the Repton District Council have decided to erect an Isolation Hospital for themselves, it becomes necessary that the Swadlincote Urban District Council should either provide a small Isolation Hospital for themselves, or in conjunction with the adjoining Hartshorn and Seals Rural District Council.

General Sanitation. Dr. Hamilton points out that the state of the district is much cleaner since the District Council have taken the work of scavenging under their own control. Complaints have been made of smells arising from the public sewers, and a number of automatic flushing chambers have been provided. Probably the most effective remedy is, however, to provide high ventilating shafts. Now that a sewage scheme has been carried out, the District Council should not delay in substituting water closets and slop-water closets for privy middens. In a district like Swadlincote, where these appliances are made, no difficulty should arise in obtaining their general adoption.

Further Sanitary Requirements. (i.) The substitution of water and slop-water closets for privy middens. (ii.) An Isolation Hospital. (iii.) The adoption of Model Building Bye-Laws.

WHITTINGTON.

Medical Officer of Health, A. M. PALMER, M.R.C.S.

Area in Acres, 1,581. Estimated Population, 9,700.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
18·14.	38·85.	8·40.	198·9.

Action taken with regard to Infectious Disease. One hundred and sixty-two cases of Scarlet Fever, 3 of Diphtheria, and 2 of Typhoid were notified during the year. Owing to the absence of means of isolation, it was impossible to limit the outbreak of Scarlet Fever. Disinfectants were supplied, and children from infected houses were kept from school.

General Sanitation. It is satisfactory to read that the back yards have been paved in Henry Street, Pottery Lane, and Johnson Street. It is to be hoped that this important sanitary work will be taken in hand all over the district. The management of the sewage farm has now been taken over by the Council. A house has been built upon the farm for the manager to live in. It is satisfactory to read that precipitation tanks are to be constructed.

Further Sanitary Requirements. (i.) The construction of precipitation tanks at their sewage works. (ii.) The adoption of water closets for privy middens. (iii.) The paving of back yards. (iv.) The disinfection of houses after infectious disease by the Council's servants. (v.) An additional supply of water by the Chesterfield Joint Water Board. (vi.) The adoption of the Infectious Diseases Prevention Act, 1890.

WIRKSWORTH.

Medical Officer of Health, A. E. BROSTER, M.R.C.S.

Area in Acres, 3,027. Estimated Population, 3,770.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
15·38.	31·29.	1·06.	67·7.

Action taken with regard to Infectious Disease. During the year 16 cases of Scarlet Fever were notified. Each case was visited by the Medical Officer, instructions given upon the prevention of the spread of the disease, and the children from infected houses prevented from attending school. Afterwards the houses were disinfected by the Council's own officer, under the Infectious Diseases Prevention Act.

General Sanitation. The work of scavenging has not yet been taken over by the Council, with the result that the slightest relaxation on the part of the Inspector is immediately followed by the over-accumulation of filth in close proximity to the dwellings, and the consequent risk of diarrhoeal diseases. No steps have yet been taken to provide additional water storage.

Further Sanitary Requirements. (i.) Increased water storage, or obtaining a supply from the Derwent Valley Scheme. (ii.) A sewerage and sewage disposal scheme. (iii.) The Authority should take into their own hands the scavenging of the district.

RURAL SANITARY DISTRICTS.

ASHBOURNE.

Medical Officer of Health, C. E. POTTER, M.B.

Area in Acres, 70,381. Estimated Population, 10,700.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
13·64.	27·75.	·84.	97·6.

Action taken with regard to Infectious Disease. During the year 60 cases of Scarlet Fever, 2 of Diphtheria, and 1 of Typhoid Fever were reported. Dr. Potter writes: "I fear the case rate of Scarlet Fever will remain high until we have efficient means of isolating the early cases, and this can only be done by having an Infectious Diseases Hospital in the district." It is satisfactory, however, to find that in no instance have further cases been notified in houses visited by the Inspector.

General Sanitation. During the year a code of Building Bye-laws has been adopted. Three houses were closed as unfit for habitation. New sewers have been laid at Tissington and Middleton-by-Wirksworth, and a new sewer is stated to be necessary at Parwich. The water supply of the district is, speaking generally, extremely bad, the villages most urgently requiring water are Kirk Ireton, Thorpe, the upper part of Brassington, Carsington, Bradbourne, and Parwich. As has been pointed out to the District Council, there is within their district a valuable spring, which yields several million gallons per day of water of an unimpeachable character. The District Council should endeavour to carry out a comprehensive scheme of water supply, either by themselves, or in conjunction with the London and North Western Railway Company.

Further Sanitary Requirements. (i.) A small Isolation Hospital in conjunction with the Ashbourne Urban District. (ii.) An improved water supply, as suggested above. (iii.) New lengths of sewer at Middleton-by-Wirksworth and Parwich, and the adoption of rough biological filters for the purification of the sewage of the various villages. (iv.) The adoption of the Infectious Diseases (Prevention) Act, 1890.

BAKEWELL (SOUTH).

Medical Officer of Health, J. KNOX, M.D.

Area in Acres, 33,742. Estimated Population, 8,100.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
13·20.	26·79.	·37.	92·1.

Action taken with regard to Infectious Disease. Thirty-eight cases of Scarlet Fever, three of Diphtheria, and three of Typhoid Fever were reported during the year. All houses where cases occurred were carefully disinfected by Mr. Toft, the Sanitary Inspector.

General Sanitation. It is stated that considerable progress has been made in providing new sewage schemes for Alport and Winster. There is no other information in the report to record.

Further Sanitary Requirements. (i.) The improvement of the water supply of Ashford, Elton, Hartington Middle Quarter, and other parishes on the Mountain Limestone. (ii.) The larger villages should be provided with public tips and rough biological filters for the purification of the sewage.

BAKEWELL (NORTH).

Medical Officer of Health, P. S. FENTEM, M.D.

Area in Acres, 50,487. Estimated Population, 10,500.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
15·61.	28·19.	1·23.	87·8.

Action taken with regard to Infectious Disease. Thirty-one cases of Scarlet Fever, 2 of Diphtheria, and 6 of Typhoid Fever were reported during the year. Schools were closed at Pilsley and Edensor for a few weeks on account of Scarlet Fever, and at Eyam for fumigation. Three of the cases of Typhoid occurred at Tideswell. Dr. Fentem writes: In all cases rigorous measures were taken to prevent the spread of infection."

General Sanitation. Beyond the information given in the Sanitary Inspector's report, no further details are given.

Further Sanitary Requirements. These are the same as stated last year, viz.: (i.) The abolition as opportunity is afforded of the old-fashioned privy midden. (ii.) The provision of public tips for the larger villages. (iii.) The carrying out of the water schemes, particularly for Earl Sterndale, Monyash, Flagg, Litton, the Longstones, Stony Middleton, etc.

BASFORD (Derbyshire Portion).

Medical Officer of Health, G. B. WRAY, M.R.C.S.

Area in Acres, 5,500. Estimated Population, 5,800.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
15·68.	28·96.	1·55.	148·8.

Action taken with regard to Infectious Disease. Fifty-two cases of Scarlet Fever and 2 of Diphtheria were reported in the three Derbyshire parishes of this Sanitary District. Of these, six cases of Scarlet Fever were removed to the Isolation Hospital at Basford. Sixteen houses were disinfected during the year.

General Sanitation. The difficult matter of providing a sewerage scheme and a water supply for the parish of Codnor and Loscoe has been solved by the Boundaries Committee of the County Council adding this parish to the Urban District of Heanor. There is still, however, the sewage disposal of Codnor Park to be dealt with. The water supply of the district can best stand over until the Nottingham main from the Derwent Valley scheme is carried through the district.

Further Sanitary Requirements. At the present time the whole of this district, except a population of 1,745, has been transferred to the Heanor Urban District. What the Boundaries Committee will do with the small population of the remaining district has not yet been decided. Codnor Park might be added to the Alfreton Urban District and Shipley to the Heanor Urban District, or Codnor Park might be added to Heanor Urban District and Shipley to Ilkeston Borough. It is to be hoped that whatever course is ultimately decided upon will be taken before the 1901 census, so that we may at last induce the Registrar-General to adopt the administrative area as the Derbyshire of the Government Returns.

BELPER A (NORTH).

Medical Officer of Health, E. GAYLOR, L.R.C.P.E.

Area in Acres, 32,334. Estimated Population, 11,400.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
10·87.	22·54.	·52	81·7.

Action taken with regard to Infectious Disease. Fifty-six cases of Scarlet Fever, 6 of Diphtheria, and 13 of Typhoid were reported during the year. Dr. Gaylor points out that the cropping up of cases here and there was due to the want of arrangements for disinfecting the bedding of the patients. Now that the Belper Isolation Hospital is open, the District

Council should provide a number of canvas bags, so that infected bedding may be packed in a canvas bag and removed to the disinfectory and be brought back in a clean canvas bag; at the same time the dwellings themselves must be thoroughly disinfected with formaline or corrosive sublimate. The rate-payers of the district will not obtain the full value for the money they have invested in the Belper Isolation Hospital until they back up the Committee by thoroughly destroying all infective material in their district. This can only be done by carrying out the work of disinfecting the infected houses by a servant of the Council.

General Sanitation. With regard to the Dairies, Cowsheds, and Milkshops Order, Dr. Gaylor writes: "This Order, to be carried out in its entirety, would entail great expense upon landowners. . . . Your officers exercise a discreet supervision." Reading between the lines, this amounts to an admission that the Orders are not enforced, and until the district Medical Officers have the same security of tenure of office as the London Medical Officers, it is useless to expect anything different.

During the year Mr. Hurt gave a burial ground to the parish of Alderwasley.

The question of the water supply of the district has received great attention, but nothing appears to have been done yet with the Dethick, Lea, and Holloway scheme. No reference is made to the important questions of scavenging and sewage disposal.

Further Sanitary Requirements. (i.) Sewage disposal schemes are required for the larger villages, such as Quarndon, Crich, Dethick, and Lea. The sewage of the other villages might be disposed of by means of bacteria beds and biological filters. (ii.) The improvement of the water supply (*a*) by the extension of the Derby mains to all the parishes within the Derby water limits. (iii.) The thorough disinfection of premises after cases of infectious disease by a servant of the Rural District Council. (iv.) The adoption of the Infectious Diseases (Prevention) Act, 1890.

BELPER B (SOUTH).

Medical Officer of Health, J. ALLEN, M.R.C.S.

Area in Acres, 18,003. Estimated Population, 13,100.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality.
10·53.	30·61.	1·52.	107·2.

Action taken with regard to Infectious Disease. Ninety-one cases of Scarlet Fever and 2 of Diphtheria were reported during the year. Dr. Allen records that in visiting the cases of Scarlet Fever he was struck with the frequency with which the

parents of the children enquired when the Isolation Hospital would be ready for patients, and states that the Hospital will prove a great boon to the neighbourhood.

General Sanitation. In the parish of Duffield, the local Committee was authorized to make arrangements for watering the streets and scavenging the district. Sewerage schemes are required at Duffield, Holbrook, Kilbourne, and Denby. With regard to the water supply of the district, when the Derwent Valley scheme is carried out the whole district will be given an opportunity of obtaining for all future time a supply of the purest water at a cheap rate. This will enable the district to adopt the water-carriage system, instead of privy-middens and cesspools.

Further Sanitary Requirements. See Belper, A.

BLACKWELL.

Medical Officer of Health, J. O. LITTLEWOOD, M.R.C.S., D.P.H.

Area in Acres, 21,140. Estimated Population, 21,000.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
18.23.	49.71.	3.0.	169.5.

Action taken with regard to Infectious Disease. One hundred and fifty-two cases of Scarlet Fever, 16 of Diphtheria, and 127 of Typhoid Fever were reported during the year. With the exception of the parishes of Glapwell and Langwith, Scarlet Fever occurred all over the district. The cases of Typhoid Fever occurred chiefly at Shirebrook. A careful investigation led to the conclusion that the number of cases became larger through the influence of secondary infection, four, five, and even six cases following in the same house when it once became infected. Dr. Littlewood proved that it was not the water supply which was at fault, and there appears no doubt that the organism has become thoroughly implanted in the soil, and that it gains access to the dwellings, either with the ground air or in the dry weather by means of dust, the organism settling upon milk, and other articles of diet, and there multiplying until a poisonous dose is produced. The pail-closets and privy-middens are important factors in producing the disease, as, if water closets were adopted, the infective matter would be removed at once, and would not have an opportunity of gaining access to the soil.

In addition to the free distribution of disinfectants, arrangements were made for the disinfection of all houses by a servant of the Authority. At present there is no means of isolating cases of infectious disease, but the North Derbyshire Hospital Committee have plans prepared for three Isolation

Hospitals, one at Morton, another at Hasland, and a third close to Bolsover, in the parish of Staveley, all of which will be available for the use of this district. There can be little doubt that if these Hospitals had been ready the outbreak at Shirebrook would have been kept within very narrow limits.

General Sanitation. A sewerage scheme for Westhouses is now in course of construction, at an estimated cost of £465. Nothing has yet been done, however, in improving the condition of affairs at South Normanton. A rough coal-filter has been constructed at Tibshelf, while the sewage works in Pleasley are also receiving attention. The filters at Doe Lea are said to be giving excellent results, as also those at Langwith. The sewers of Hills Town have also been made self-cleansing.

The public scavenging at South Normanton has proceeded satisfactorily. The contract for this parish is £150 per year. At Pinxton the contract price is £120 per year. At Tibshelf the Babbington Colliery Company carry out the scavenging for their own cottages, while Pleasley is scavenged under contract for £300 per year. Dr. Littlewood reports that there is a great improvement in the condition of the houses as a result of public scavenging. Numerous complaints were made of the insufficient water supply to Newton, in the parish of Blackwell, and at last arrangements were made for a supply from the Corporation of Mansfield through the Tibshelf mains. The Sutton-in-Ashfield water, which is also laid on at South Normanton, seems to be of insufficient quantity, and eventually will have to be supplemented from the Derwent Valley scheme. Tibshelf is well supplied from the Mansfield mains, while Pleasley is supplied from two deep wells, the Shirebrook and Pleasley wells. Dr. Littlewood gives analyses of these two waters, from which it appears to be desirable that a thorough investigation of the latter should be made. The Doe Lea water has been systematically analysed by Dr. Littlewood, as he regards the source as one which requires constant supervision.

Further Sanitary Requirements. (i.) The adoption of water closets in the place of privy-middens and pail-closets. (ii.) The improvement of the sewage disposal works, on the natural lines suggested by Dr. Littlewood. (iii.) Provision of the Isolation Hospitals by the North Derbyshire Hospital Committee. (iv.) The District Council should take into consideration the means of enabling them to profit by the Derwent Valley Water Scheme, either in conjunction with the Chesterfield Rural District Council or the adjoining Nottinghamshire districts.

CHAPEL-EN-LE-FRITH.

Medical Officer of Health, C. J. BENNET, M.R.C.S.

Area in Acres, 78,859.

Estimated Population, 13,500.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
15·55.	26·59.	1·40.	116·9.

Action taken with regard to Infectious Disease. Seventeen cases of Scarlet Fever, 12 of Diphtheria, and 1 of Typhoid were reported during the year. The cases of Scarlet Fever were pretty uniformly distributed all over the district. Insanitary conditions were found to be answerable for the cases of Diphtheria and Typhoid. Schools were closed for a fortnight on account of Measles at Chinley, Brownside, and Horwich.

General Sanitation. A water scheme for Chinley, Bugsworth, and Brownside has been approved by the Parish Council; and Dr. Bennet points out that it is important the scheme should be proceeded with immediately, as the High Peak Hospital Committee will be dependent upon this as a source of water supply. The inhabitants of Whaley Bridge again suffered from scarcity of water. Dr. Bennet suggests that the District Council should take over the two supplies to Chapel-en-le-Frith, with a view of securing for the inhabitants of the district some of the remaining sources of water which are still available, and he sounds the timely note of warning to the District Council with regard to the Stockport Corporation endeavouring to increase its supplies within the area of the District Council. With regard to the part of the District within the Derwent watershed, a scheme is in progress for the supply of Bamford. Other schemes were allowed to remain in abeyance, pending the settlement of the Derwent Valley Water Bill; now that this matter is settled, the District Council can decide to what extent the scheme is available for the supply of their district.

During the year the contract for the Castleton sewerage and sewage disposal works was let. A scheme is required for Whaley Bridge. A scheme was approved some two years ago, but nothing has yet been done. Dr. Bennet suggests that the condition of Chapel-en-le-Frith would be improved by the adoption of water closets in place of privy-middens.

Further Sanitary Requirements. (i.) The carrying out of sewerage and sewage disposal schemes for Castleton and Whaley Bridge. (ii.) The improvement of the water supplies, as mentioned above.

CHESTERFIELD.

Medical Officer of Health, HERBERT PECK, M.B., D.P.H.

Area in Acres, 69,839. Estimated Population, 68,000.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
14·79.	35·19.	1·77.	148·7.

Action taken with regard to Infectious Disease. Four hundred and twelve cases of Scarlet Fever, 15 of Diphtheria, and 57 of Typhoid Fever were reported during the year. The cases of Scarlet Fever occurred in 259 infected houses. Two hundred and twenty-nine were disinfected by Inspector Hutchinson, the special Inspector appointed to carry out the work of disinfection. With regard to the cases of Typhoid Fever, Dr. Peck writes:—"The common cause for the spreading of this disease is the deposition of infectious rubbish in privies and ashpits." The Typhoid germs may live for a long time in such favourable conditions as are found in a privy-midden, or an unpaved backyard, and he concludes by stating that he will return to this subject when the district has obtained an improved water supply. Now that the District Council are enabled, under the Derwent Valley Water Bill, to obtain from Sheffield 12½ gallons per head per day for the entire population, at a price which they themselves have accepted, there is no reason why water closets should not be generally adopted, the dangerous conditions arising from the pollution of the sub-soil which Dr. Peck finds, being thereby prevented. When the Isolation Hospitals are provided by the North Derbyshire Hospital Committee, the District Council will be enabled to take satisfactory steps for the prevention of the spread of infectious disease.

General Sanitation. Dr. Peck describes the methods of disposing of the sewage of the various parishes. Speaking generally, he is compelled to admit that although the schemes which have been carried out have cost a considerable sum of money, the results are unsatisfactory. The following abstract is so much to the point that it is well worth reproducing:—

"Bacteriolysis, or the bacteriological treatment of sewage, which has attracted so much attention of late, and is superseding chemical and other methods of treatment in many places, is likely to prove very valuable in this district, handicapped, as it is, with a shallow soil, covering a heavy clay subsoil.

"Its fundamental principle is the systematic employment, under the best possible conditions, of organisms which live upon sewage, and thus break it up into its harmless constituents. The method usually adopted is to provide—

- “(a) A tank, or succession of tanks, to allow of the subsidence, from the sewage slowly flowing through it, of road-silt and other mineral substances not affected by the organisms.
- “(b) A covered tank, to which as little air as possible is admitted, so as to favour the growth of those organisms which liquefy organic matter, and thrive best in the absence of light and air (‘anaerobic germs’).
- “(c) Biological filters of coal or coke, duplicated and used alternately, which become filled with inconceivable numbers of nitrifying organisms (‘aerobic germs’), which carry the process further and oxidize ammonia into nitrites and nitrates.”

Some time ago, when calling the attention of this District Council to the question of river pollution, I strongly advocated the District Council appointing a young engineer or surveyor to take in hand the whole of the sewage disposal schemes of their district. I am now still more convinced that this is the only satisfactory as well as the most economical way of dealing with the problem. To produce a really economical scheme of sewage purification takes infinitely more time, and is far greater trouble than preparing a scheme that merely satisfies the requirements of the Local Government Board, and the present system of paying an engineer by commission is unfair to the man, who does not spare himself to produce a really economical scheme. The Chesterfield Corporation have already set an example in this matter, and the District Council would do well to take into consideration the advisability of appointing someone to prepare the plans for the disposal of the sewage at the various outfalls on the lines advocated by Dr. Peck, and which have been already demonstrated as successful by the Corporation of Chesterfield.

With regard to the water supply the following information is given:—

“The Ramsley reservoir has a storage capacity of 18 million and Crowhole reservoir of 25 million gallons, the two having a catchment area of 2,200 acres.* The Press reservoir has a storage capacity of 25 million gallons, and a catchment area of about 500 acres. The Linacre reservoir has a storage capacity of 150 million gallons, and a catchment area of about 1,300 acres. The Basshouse reservoir, Ashover, has a capacity of about 15,000 gallons.”

A scheme is in progress to provide storage room in the northern part of the district for an additional 70 million gallons, which, it is hoped, will be sufficient to meet the wants of the population for many years to come.

* The gross annual rainfall on this gathering ground is 35 inches; the net collectable dry weather yield about 13 inches.

The following table gives the number of houses supplied by public service in each township, and other particulars :—

HOUSES SUPPLIED WITH WATER BY PUBLIC SERVICE.

Townships.	No. of Supplies	Percentage of inhabited houses supplied.	Reservoir.	Supplying Authority.
Ashover	123	22·2	Basshouse	Ashover Water Coy.
Barlow.....	90	48·6	Crowhole	Rural Dist. Council
Beighton	585	85·4	Ramsley	Do.
Brackenfield	Nil.	Nil.	None	None
Brimington	788	84·3	Linacre	Chesterfield Water Board
Calow	8	5	Crowhole	Rural Dist. Council
Coal Aston.....	129	89·5	Ramsley	Do.
Dronfield Wood-house	137	85·6	Do.	Do.
Eckington	2,240	87·1	Do. & Crowhole	Do.
Hasland	1,078	96·1	Linacre	Chesterfield Water Board
Heath	9	10·3	Press	Rural Dist. Council
Holmesfield	42	37·5	Ramsley	Do.
Killamarsh.....	710	94·1	Do.	Do.
Morton	124	84·3	Press	Do.
North Wingfield ..	464	92·4	Do.	Do.
Pilsley	396	88·1	Do.	Do.
Shirland and Higham	609	83	Do.	Do.
Staveley	1,966	98·7	Crowhole	Do.
Stretton	51	38·9	Press	Do.
Sutton-cum-Duckmanton	1	·5	Do.	Do.
Tapton.....	54	64·2	Linacre	Chesterfield Water Board
Temple Normanton	50	100	Press	Rural Dist. Council
*Tupton	335	87·4	Do.	Do.
Unston.....	363	97	Ramsley	Do.
Wessington.....	26	19·1	Press	Do.
Wingerworth.....	2	2·5	Do.	Do.
*Woodthorpe	335	87·4	Do.	Do.
Chesterfield Rural Dis.	10,380	81·3		

* These figures include the number of supplies in both townships, there being no separate register for each township, as appears very desirable.

The information given above by Dr. Peck proved of the greatest value to the County Council in their endeavours to obtain for the Rother Valley a proper share of Derwent Valley water. The District Council is to be congratulated upon obtaining the services of Dr. Peck.

Further Sanitary Requirements. (i.) An increased water supply. (ii.) The construction of sewage disposal works upon modern biological lines. (iii.) The conversion of privies and pail-closets to water-closets.

CLOWN.

Medical Officer of Health, C. WILLS, M.R.C.S.

Area in Acres, 13,427. Estimated Population, 10,000.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
18·00.	42·40.	2·40.	191·0.

Action taken with regard to Infectious Disease. Fifty-nine cases of Scarlet Fever, 9 of Diphtheria, and 15 of Typhoid Fever were reported during the year. The houses in which infectious diseases have occurred have all been visited by the Medical Officer, and instructions have been given as to the precautions which should be taken against the spread of infection. When the Mastin Moor Hospital is open no doubt the District Council will make arrangements for the disinfection of infected houses and bedding.

General Sanitation. Dr. Wills advocates the District Council undertaking the scavenging of Whitwell and Cresswell. During the year Building Bye-Laws were passed, and it is stated that an improved water supply for Clown and Barlborough is being obtained through private enterprise. The Surveyor of the District Council has prepared plans for the sewerage of Whitwell and Hodthorpe. The drainage of Clown and Barlborough also requires improvement.

Further Sanitary Requirements. (i.) The carrying out of a water scheme for the supply of water to Clown, Barlborough, and Bakestone Moor. (ii.) The sewerage and sewage disposal of Whitwell, Barlborough, and Bakestone Moor.

GLOSSOP DALE.

Medical Officer of Health, D. J. MACKENZIE, M.D.

Area in Acres, 17,893. Estimated Population, 4,700.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
11·70.	21·06.	1·48.	80·8.

Action taken with regard to Infectious Disease. The Infectious Diseases Notification Act is not in force, so that although there were 5 deaths from Typhoid Fever a complete list of the cases could not be obtained, but Dr. Mackenzie attributes the presence of this disease to the contamination of the soil by the infective leakage from privy-middens. The necessity for the Rural District joining the borough for an Isolation Hospital is pointed out.

General Sanitation. The Medical Officer advises the carrying out of public scavenging for Marple Bridge. The pollution of the river here is bound to continue until the District Council have made up their minds to carry out this work themselves.

Little progress has been made toward carrying out a sewerage and sewage disposal scheme for Marple Bridge. The Medical Officer calls attention to the necessity for piping the various springs which are used for the water supply of the district in iron pipes. At the present time many are conveyed in rubble drains, which permit of surface pollutions contaminating the water.

Further Sanitary Requirements. (i.) The provision of a small Isolation Hospital in conjunction with the Borough of Glossop. (ii.) The completion of the sewerage and sewage disposal scheme for Marple Bridge, and Ludworth and Chisworth. (iii.) Public scavenging at Marple Bridge.

HARTSHORNE AND SEALS.

Medical Officer of Health, R. LOGAN, M.R.C.S.

Area in Acres, 15,282. Estimated Population, 6,400.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
18·75.	32·18.	2·65.	199·0.

Action taken with regard to Infectious Disease. Nine cases of Scarlet Fever, 3 of Diphtheria, and 8 of Typhoid Fever were reported during the year. Two of the cases of Scarlet Fever were removed to the Isolation Hospital. During the year the County Council held an inquiry upon the advisability of joining this district with the Swadlincote Urban and Repton Rural Districts for the provision of a Joint Isolation Hospital, but as the Repton Rural District decided to erect a proper Hospital for their own district, the question of the means of isolating the infectious sick in this district was allowed to remain in abeyance.

General Sanitation. A scheme for the sewerage and sewage disposal of Woodville was laid before the Local Government Board. The method of disposal was precipitation, artificial filtration, and subsequent irrigation over stiff clay land. The area of filter proposed was altogether inadequate; in addition to this, the sewage to be disposed of consisted largely of brewery waste, which is extremely difficult to treat, and, on behalf of the County Council, it was suggested that the brewery waste should be carried to the outfall works in a separate sewer, so that it might there undergo "bacteriolysis" either in a septic tank or bacteria beds. It is satisfactory to see that the District Council have decided to carry out a small sewerage scheme, at any rate for a part of Hartshorne.

The Milton water is now supplied to Woodville. A better supply is also required for Hartshorne and the Seals. Nothing was done during this year to carry out public scavenging at

Woodville, where the population is practically Urban, and where great accumulations of ashes and house refuse close to the dwellings constitute grave nuisances, and give rise to much sickness.

Further Sanitary Requirements. (i.) The provision of a proper Isolation Hospital, with a steam disinfecter, in conjunction with the Swadlincote Urban District. (ii.) The sewerage and sewage disposal of Woodville. (iii.) The provision of a public water supply for Hartshorne and the Seals. (iv.) The adoption of the Infectious Diseases (Prevention) Act, 1890.

HAYFIELD.

Medical Officer of Health, C. J. BENNET, M.R.C.S.

Area in Acres, 10,282. Estimated Population, 4,000.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
15·25.	21·25.	1·50.	117·6.

Action taken with regard to Infectious Disease. Four cases of Scarlet Fever, 3 of Diphtheria, and 1 of Typhoid were notified during the year. The Medical Officer enquired into all cases of infectious disease, and where found associated with insanitary conditions these were removed.

General Sanitation. The sewerage and sewage disposal works of Hayfield are now complete. A recent sample shows that nitrates are not yet produced. It is a pity that these works were not constructed to admit of the removal of the sludge from the tanks automatically. It would have been better, also, if biological filters had been constructed. Nothing has yet been done with regard to carrying out a water scheme for Hayfield. There is no place in Derbyshire which could more easily obtain a perfect supply of water. By sinking a well into the Kinder grit to the north of Hayfield, on the road to Little Hayfield, enough water could be obtained to supply Hayfield and New Mills, as the Kinder grit is of great thickness in this position, and has an exposure over a mile wide, and several miles in extent.

Further Sanitary Requirements. (i.) A water supply for Hayfield. (ii.) A sewerage and sewage disposal scheme for Mellor.

NORTON.

Medical Officer of Health, A. K. GALE, M.R.C.S.

Area in Acres, 10,630. Estimated Population, 12,250.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
12·00.	29·71.	2·44.	109·8.

Action taken with regard to Infectious Disease. Sixty-four cases of Scarlet Fever, 6 of Diphtheria, and 16 of Typhoid were notified during the year. Sixteen of the Scarlet Fever cases occurred in the townships of Dore and Totley. Owing to the difficulty of getting parents to notify mild cases of Scarlet

Fever, a prosecution was instituted, and a fine inflicted on the parents for not notifying. With regard to the Typhoid Fever, Dr. Gale attributes the prevalence of this disease to the contamination of the soil close to the dwellings, and suggests the remedies tabulated below, under the head of "Further Sanitary Requirements."

General Sanitation. It is satisfactory to read that the crusade against wet and faulty ashpits has been steadily persevered with. In several cases of defective ashpits the Council have not considered them "sufficient" within the meaning of the Public Health Act, 1875, and have called upon the owners to substitute water closets. The Sheffield water mains have been extended to Bole Hill, Norton, Back Moor, Hensworth, Greenhill, Totley Bents, and the Totley Brook Estate. It is proposed to connect the sewer of the special drainage district of Dore with the Sheffield sewers, but as the Corporation of Sheffield fails to purify its sewage, this only has the effect of removing pollution further down the stream, and the Local Government Board object to the arrangement being carried out. Judging from the extracts of the report of Mr. Mansergh, which have been published, it will take a very long time to carry out an efficient sewerage scheme for Sheffield, and the District Council will be well advised in constructing small bacteria beds and biological filters of coal. This could be done out of current rate, as is being done in the case of Chesterfield, to the filters of which place the attention of the Council should be given.

Further Sanitary Requirements. (i.) The substitution of water closets for privy-middens. (ii.) The paving of passages, backyards, and other open spaces with some impervious material. (iii.) Efficient sewage disposal schemes for Dore and Totley. (iv.) The erection of an Isolation Hospital for the district by the North Derbyshire Hospital Committee.

REPTON.

Medical Officer of Health, E. RIDING, M.R.C.S.

Area in Acres, 54,263. Estimated Population, 15,100.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
19.53.	29.60.	2.51.	143.1.

Action taken with regard to Infectious Disease. Thirty-one cases of Scarlet Fever, 4 of Diphtheria, and 1 of Typhoid were reported during the year. Eleven of the cases of Scarlet Fever were removed to the temporary Isolation Hospital at Etwall. It is satisfactory to read that the work of disinfection is now carried out by the Inspector of Nuisances. The District Council have decided to erect an Isolation Hospital which will also be used by the Sudbury Rural and part of the adjoining Ashbourne Rural District.

General Sanitation. Mickleover has been re-sewered, the sewage being disposed of by irrigation upon fields belonging to Mr. Newton. At Etwall an attempt has been made to purify the sewage by bacteria beds, and subsequent intermittent filtration. Sewerage schemes have also been prepared for Coton-in-the-Elms and Castle Gresley, while further schemes are required for the part of Etwall on the Egginton Road for Hatton and Linton.

Attempts have been made to bore through the new red marl upon the Burton Sewage Farm, with the hope of obtaining a supply from the Bunter sandstone underneath. Up to the present the Bunter has not been reached. The County Asylum Committee are also endeavouring, at Mickleover, to bore through the marl in the hope of reaching the Bunter sandstone: this latter place is within the limits of supply of the Derby Corporation, and when the Derwent Valley water scheme is carried out, application should be made to the Corporation to extend their mains, so as to supply Mickleover, Etwall, and Egginton, and the rest of this portion of the county. This is the only way by which this part of Derbyshire can obtain a supply of really good water. During the year the District Council approved of regulations under the Dairies, Cowsheds, and Milkshops Orders. These have now been submitted to the Local Government Board for their approval.

Further Sanitary Requirements. (i.) The sewerage disposal schemes for Repton and the places mentioned above. (ii.) The extension of the Derby water mains to Mickleover, with a view of their further extension to Etwall, &c. (iii.) The carrying out of the Isolation Hospital scheme already in hand. (iv.) The adoption of the Infectious Diseases (Prevention) Act, 1890.

SHARDLOW.

Medical Officer of Health, C. HARWOOD, M.D.

Area in Acres, 45,620. Estimated Population, 30,000.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
15.10.	32.60.	1.73.	137 0.

Action taken with regard to Infectious Disease. One hundred and thirty-three cases of Scarlet Fever, 33 of Diphtheria, and 13 of Typhoid Fever were reported during the year. Schools were closed on account of scarlet fever at Barrow, while, for the same reason, the Post Office was temporarily removed at Littleover.

General Sanitation. A scheme has been prepared for the sewerage of Littleover, another scheme has also been prepared for the sewerage and sewage disposal of Normanton, while the construction of sewage disposal works at Sandiacre is proceeding rapidly. It is stated that, "The management of the

sewage farm at Melbourne continues satisfactory. As an instance, one crop (celery) having realized the sum of £106 off one acre of land." Although this is satisfactory from a financial point of view, one must protest against celery, lettuce, and vegetables, which are consumed without being cooked, being irrigated with sewage, which in Melbourne too frequently contains the germs of typhoid fever. For this reason, as well as with the object of seeing that the farm is worked so as to really purify the sewage, it is distinctly advisable that the District Council should take the management of the farm over into their own hands.

The water supply in the bulk of the parishes is, owing to the district being situated on the new red marl and superincumbent alluvium, of very bad quality. This matter can best be remedied when the Derwent Valley Water Scheme is carried out, as the main of the Joint Board will pass through Little Eaton, Breadsall, Chaddesden, Spondon, Ockbrook, Draycott, and Sawley; and it would be a comparatively simple matter to arrange for a supply to nearly every parish.

Further Sanitary Requirements. (i.) The completion of the schemes for the disposal of sewage which are already in hand, and that of Stanley, Spondon, and Borrowash. (ii.) The extension of the system of public scavenging to the more populous parishes. (iii.) When the Derwent Valley Water Scheme is carried out, a public water supply. (iv.) The adoption of the Infectious Diseases (Prevention) Act, 1890.

SUDBURY.

Medical Officer of Health, B. H. HERBERT, M.R.C.S.

Area in Acres, 17,300. Estimated Population, 2,650.

Crude Death Rate,	Birth Rate,	Zymotic Death Rate,	Infantile Mortality,
12·07.	25·28.	·37.	59·7.

Action taken with regard to Infectious Disease. Nine cases of Scarlet Fever, 1 of Diphtheria, and 2 of Typhoid Fever were reported during the year. All the cases were thoroughly investigated, and precautions taken for the prevention of infection.

General Sanitation. Improvements were made in the sewerage of the lower part of Doveridge, but the main scheme is awaiting the results of the experience obtained by the biological treatment on bacteria beds and intermittent coal filters.

Further Sanitary Requirements. (i.) The provision of means of isolating cases of infectious disease. This, it appears, is to be done by agreement with the Repton Rural District Council. (ii.) The abatement of nuisances arising from village slop water. (iii.) The adoption of the Infectious Diseases (Prevention) Act, 1890.

SUMMARY OF SANITARY INSPECTORS' WORK.
URBAN.

Districts and Populations.	Dwelling Houses.		Drainage.			Closets and Ashpits.					Surface of Courts and Yards.	Eaves Spouts and Down Spouts.	Urinals Defective.	Water Supply.	Offensive Accumulations.	Animals im- properly kept.	Pigsties.	Smoke nuisance.	Overcrowding.	Foul condition of houses.	Totals.	Precautions taken by Inspector against Infectious Disease, the Sale of Adulterated Food and Drugs and Unsound Meat, and under the Canal Boats Act.
	Repaired.	Unfit for habitation.	No discon- nection of waste pipe.	Defective Traps, and Inlets, and Drains.	Drains obstructed.	Insanitary Privies and Ashpits.	Insufficient Closet Accommo- dation.	Conversion of Privies into W.C.'s.	Defective Water Closets.													
Alfreton. 17,700.	70	..	..	10	12	12	2	..	..	..	3	1	..	..	50	1	40	2	2	..	205	Two seizures of meat have been made ; 1 seizure of 127 lbs. of fish, and 1 seizure of 7 couples of rabbits during the year ; 16 samples of water have been sub- mitted to County Analyst.
	30	..	8	60	44	45	4	..	1	567	4	2	2	4	1	1	..	2	2	..	776	
	33	..	8	70	56	57	6	..	1	617	4	3	2	4	1	1	40	2	2	..	909	
Alvaston and Boulton 4,250.	..	..	..	5	..	56	..	..	..	..	..	15	..	11	8	..	3	..	..	..	98	Of 11 infected houses 9 were disinfected.
	6	..	..	1	1	..	..	..	..	..	..	15	..	..	..	..	..	..	..	8		
	6	..	..	5	..	56	..	..	..	..	..	15	..	11	..	..	3	..	..	104		
Ashbourne. 4,000.	274	..	2	8	5	11	..	3	2	..	..	..	1	18	4	..	2	..	..	..	330	Careful examination of premises was made in all cases of infectious disease. Eight houses were disinfected after in- fectious disease.
	..	..	2	3	1	3	..	1	1	..	..	1	..	..	..	..	1	..	5	..	18	
	..	..	3	9	6	11	..	2	3	..	..	..	..	18	4	..	3	..	5	..	65	
Bakewell. 2,900.	1	..	66	124	28	114	22	13	1	1	1	2	27	10	10	..	3	..	1	..	423	Disinfected schools and 8 infected houses.
	1	..	65	4	..	4	3	..	..	..	..	..	1	..	1	..	..	..	1	..	15	
	..	..	65	104	28	97	5	13	5	10	10	2	27	10	9	..	3	..	1	..	380	
Baslow. 890.	132	..	..	18	6	38	..	5	..	..	..	..	1	..	12	..	9	1	1	..	223	
	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	
	34	..	..	18	6	38	..	5	..	..	..	..	1	..	12	..	9	1	1	..	125	
Belper. 11,100.	253	2	..	34	..	30	..	..	3	..	..	..	..	..	..	..	..	..	..	..	322	Seventeen houses were disinfected. Weekly inspection of market, &c.
	..	2	61	61	..	55	..	41	4	..	..	3	6	65	4	4	4	1	6	28	345	
	..	2	61	61	..	52	..	..	3	..	..	..	2	..	4	4	..	..	6	..	195	

URBAN—continued.

Districts and Populations.	Dwelling Houses.		Drainage.			Closets and Ashpits.					Surface of Courts and Yards.		Down Spouts.	Urinals Defective.	Water Supply.	Offensive Accumulations.	Animals improperly kept.	Pigsties.	Smoke nuisance.	Overcrowding.	Foul condition of houses.	Totals.	Precautions taken by Inspector against Infectious Disease, the Sale of Adulterated Food and Drugs and Unsound Meat, and under the Canal Boats Act.	
	Repaired.	Unfit for habitation.	No disconnection of waste pipe.	Defective Traps, Inlets, and Drains.	Drains obstructed.	Insanitary Privies and Ashpits.	Insufficient Closet Accommodation.	Conversion of Privies into W.C.'s.	Defective Water Closets.				Eaves Spouts and											
Bolsover. 5,550.	7	1	..	5	10	59	..	..	..	..	..	..	..	..	..	2	..	..	..	1	..	..	85	Fifteen notices served to clean out closets, and disinfect same where cases of infectious disease have occurred 30 houses were infected The slaughter houses have been inspected, and the meat found of good quality.
	3	1	..	..	..	1	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	8		
	3	1	..	5	10	56	..	..	..	..	..	..	..	..	..	4	..	..	..	..	..	79		
Bonsall. 1,350.	340	..	..	15	6	310	6	1	..	..	..	..	..	1	..	7	..	58	..	..	..	744	One house was disinfected.	
	..	..	..	..	..	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10			
	3	..	..	..	..	280	..	..	..	..	..	..	..	..	..	..	..	..	..	..	283			
Brampton and Walton. 2,700.	..	2	2	17	9	11	..	..	..	..	..	..	..	..	..	13	1	..	..	1	..	56	Four houses were disinfected after infectious disease.	
	..	2	2	15	7	7	..	..	..	..	..	..	..	..	..	7	1	..	..	1	..	42		
	..	2	2	10	7	7	..	..	..	..	..	..	..	..	..	10	1	..	..	1	..	40		
Buxton. 8,900.	1694	..	264	120	69	150	310	11	323	54	47	3	133	58	..	58	..	..	..	..	..	3236	Every case of infectious disease reported was inquired into, and either removed to Isolation Hospital or isolated at patient's home. Efficient fumigation of premises was done. Frequent inspections of slaughter houses and meat shops was made. No complaints of food and drugs were made during the year.	
	..	..	..	5	..	19	..	19	..	39	..	..	..	..	..	..	..	..	6	4	..	32		
	..	..	264	125	69	169	310	30	323	93	207	3	133	58	..	..	..	..	6	4	..	1794		
Chesterfield (Borough). 25,000.	903	7	62	222	102	138	18	34	43	113	104	19	..	13	15	13	15	11	1	29	40	1874	124 houses were infected, and 119 disinfected; 201 visits were made to infected houses; 1,640 articles of bedding were disinfected by steam; 20 samples of milk analysed, 1 was found adulterated; 2 of butter and 2 of coffee were found genuine; 5 barrels of fish were condemned and destroyed.	
	65	7	1	13	33	7	2	..	3	6	1	..	58	5	3	5	3	..	1	12	..	217		
	67	13	63	229	135	137	20	31	46	92	105	19	56	18	18	11	11	1	1	41	40	1142		

Districts and Populations.		Dwelling Houses.		Drainage.			Closets and Ashpits.					Surface of Courts and Yards.	Leaves Spouts and Down Spouts.	Urinals Defective.	Water Supply.	Offensive Accumulations.	Animals im- properly kept.	Pigsties.	Smoke nuisance.	Overcrowding.	Foul conditions of houses.	Totals.	Precautions taken by Inspector against Infectious Disease, the Sale of Adulterated Food and Drugs and Unsound Meat, and under the Canal Boats Act.
		Unfit for habitation.	Repaired.	No discon- nection of waste pipe.	Defective Traps, and Inlets, and Drains.	Drains obstructed.	Insanitary Privies and Ashpits.	Insufficient Closet Accommo- dation.	Conversion of Privies into W.C.'s.	Defective Water Closets.													
Clay Cross. 9,000.	Informal notices served } and inspections } Legal notices served Nuisances, &c., abated	60	..	3	19	92	50	7	..	1	..	..	3	3	3	6	..	4	1	..	12	261	Out of 161 infected houses, 156 were disinfected.
		33	..	..	..	13	3	..	..	..	..	..	..	..	..	..	..	..	..	1	12	62	
		27	..	3	11	86	42	6	..	1	..	..	..	3	3	6	..	2	1	1	12	204	
Dronfield. 4,100.	Informal notices served } and inspections } Legal notices served Nuisances, &c., abated	6	..	..	..	..	87	..	..	..	..	..	..	..	..	17	..	1	..	..	..	111	Constant inspection of perishable food. Personal dealing with all cases of infectious disease from time notified to disinfection of infected house. Isolation of patients as far as possible. 14 houses were infected, and 11 dis- infected.
		1	..	..	..	..	87	..	..	..	..	1	1	3	3	..	..	..	..	1	5	11	
		1	..	..	..	..	..	..	..	..	..	..	..	3	3	..	17	..	1	..	1	5	
Fairfield. 2,600.	Informal notices served } and inspections } Legal notices served Nuisances, &c., abated	137	..	9	3	1	..	..	..	..	..	..	2	..	..	..	..	7	..	..	..	159	Sixteen houses were infected, all of which were disinfected.
		..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
		..	..	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13	
Glossop (Borough). 23,400.	Informal notices served } and inspections } Legal notices served Nuisances, &c., abated	1237	..	275	41	15	78	4	3	5	10	8	3	3	1	673	5	13	3	1	28	2403	Three seizures of unwholesome food ; 6 samples of food taken for analysis ; 5 samples of water were analysed, and declared fit for domestic use ; 289 lots of bedding have been stove or burnt ; 334 houses were infected, and 299 disin- fected after disease had abated ; 16 schools were disinfected.
		..	..	..	37	15	39	3	3	5	8	8	3	3	1	673	5	10	3	1	28	1108	
		3	..	263	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
* Heage. 2,800.	Informal notices served } and inspections } Legal notices served Nuisances, &c., abated	121	..	14	7	2	7	..	..	..	5	..	..	..	..	16	..	4	..	..	..	176	Out of 103 infected houses 49 were dis- infected by the Council and the others by the occupiers. In typhoid cases patent pails were provided.
		2	..	4	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	
		2	..	12	11	2	5	..	..	..	..	..	..	..	..	..	14	..	4	..	..	50	
Heanor. 12,500.	Informal notices served } and inspections } Legal notices served Nuisances, &c., abated	855	1	5	33	4	29	1	..	1	1	..	..	..	6	12	..	1	..	1	..	950	Out of 103 infected houses 49 were dis- infected by the Council and the others by the occupiers. In typhoid cases patent pails were provided.
		1	1	5	5	2	17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	31	
		1	1	15	28	4	60	1	..	1	..	..	..	..	..	6	12	..	1	..	1	..	

* Return for 6 months only.

URBAN—continued.

Districts and Populations.	Dwelling Houses.		Drainage.				Closets and Ashpits.				Surface of Courts and Yards.	Eaves Spouts and Down Spouts.	Animals Defective.	Water Supply.	Offensive Accumulations.	Animals im- properly kept.	Pigsties.	Smoke nuisance.	Overcrowding.	Foul conditions of houses.	Totals.	Precautions taken by Inspector against Infectious Disease, the Sale of Adulterated Food and Drugs and Unsound Meat, and under the Canal Boats Act.
	Repaired.	Unfit for habitation.	No discon- nection of waste pipe.	Defective Traps, Inlets, and Drains.	Drains obstructed.	Insanitary Privies and Ashpits.	Insufficient Closet Accommo- dation.	Conversion of Privies into W.C.'s.	Defective Water Closets.													
Ilkeston (Borough). 25,800.	7	6	..	68	86	47	12	..	2	18	..	3	..	6	..	12	1	1	1	..	277	Re Typhoid.—Below is the number of different closets in use and the number of houses infected:— Water Closets, 248. No. Infected, 5. Slop " 430. " " 10. Pail " 2,400. " " 39. Privy Middens 2,062. " " 24.
	4	1	..	40	63	47	12	8	2	..	..	2	..	..	..	12	1	1	14	14	207	
	7	6	..	68	86	47	12	8	2	18	..	3	..	6	..	12	1	1	1	14	277	
Long Eaton. 12,400.	..	1	..	9	15	11	..	..	1	4	2	1	..	4	2	4	8	14	8	..	111	All infected houses were disinfected.
	..	1	..	..	1	..	..	..	1	..	..	1	..	..	..	1	..	..	..	..	5	
	..	1	..	9	15	9	..	..	1	40	..	1	..	4	..	4	8	..	..	..	92	
Matlock. 5,900.	240	..	2	37	4	19	..	3	4	..	1	1	..	1	..	..	1	1	1	..	314	Disinfectants were provided. General inspection of property, drainage system, street gullies, &c.
	..	..	2	3	..	..	1	1	..	8	..	..	2	..	..	..	..	..	..	..	17	
	..	..	4	39	4	19	7	4	..	9	..	..	2	..	..	..	1	..	..	..	89	
Matlock Bath. 1,960.	250	1	5	21	3	19	7	17	9	3	1	..	1	3	..	2	1	2	1	2	345	Every infected house was provided with disinfectants and solids. There was thorough disinfection after recovery or otherwise of patient.
	5	1	..	1	..	2	..	4	..	..	..	..	..	2	..	1	1	..	2	17		
	5	1	5	21	3	19	7	17	9	3	1	..	1	3	..	2	1	..	2	100		
Newbold and Dunston. 5,550.	..	..	..	7	4	6	..	..	1	..	1	..	..	9	1	6	1	..	1	..	35	Five infected houses were disinfected.
	..	..	11	12	2	77	..	..	..	..	..	..	..	5	..	2	..	..	..	..	109	
	..	..	11	32	6	75	..	..	1	..	1	..	..	14	..	8	1	..	1	..	149	
New Mills. 6,720.	..	..	12	13	30	44	..	..	..	..	3	11	..	..	..	..	..	..	..	..	113	Five infected houses were disinfected.
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	..	..	..	8	26	44	..	..	..	..	3	11	..	..	..	..	..	..	..	..	92	

URBAN—continued.

Districts and Populations.		Dwelling Houses.		Drainage.				Closets and Ashpits.				Surface of Courts and Yards.				Leaves Spouts and Down Spouts.	Urinals Defective.	Water Supply.	Offensive Accumulations.	Animals im- properly kept.	Pigsties.	Smoke nuisance.	Overcrowding.	Foul conditions of houses.	Totals.	Precautions taken by Inspector against Infectious Disease, the Sale of Adulterated Food and Drugs and Unsound Meat, and under the Canal Boats Act.	
		Unfit for habitation.	No discon- nection of waste pipe.	Defective Traps, and Inlets, and Drains.	Drains obstructed.	Insanitary Privies and Ashpits.	Insufficient Closet Accommo- dation.	Conversion of Privies into W.C.'s.	Defective Water Closets.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..
North Darley. 2,400.	Informal notices served } and inspections } Legal notices served } Nuisances, &c., abated }	..	1	2	15	9	41	..	..	..	10	..	2	1	3	..	1	..	..	..	1	..	..	..	85	Twelve infected houses were disinfected. Placards were issued for the boiling of milk and water on two occasions on appearance of Enteric Fever.	
		4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4		
		4	1	2	15	9	41	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	88		
Ripley. 10,300.	Informal notices served } and inspections } Legal notices served } Nuisances, &c., abated }	..	9	15	260	..	164	..	14	..	..	..	..	..	92	..	62	8	12	40	676	..	..	..	676		
		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..
		..	2	..	50	..	50	..	4	..	..	..	..	..	..	32	..	12	3	6	16	175	..	..	..		175
South Darley. 820.	Informal notices served } and inspections } Legal notices served } Nuisances, &c., abated }	..	..	..	22	2	11	..	..	..	..	..	5	..	6	..	..	..	..	..	..	..	..	..	46	Three infected houses were disinfected.	
		2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	3		
		2	..	..	15	..	11	..	..	..	..	..	..	4	..	6	..	..	..	..	..	..	..	..	40		
Swadlincote. 15,500.	Informal notices served } and inspections } Legal notices served } Nuisances, &c., abated }	72	6	..	20	10	30	40	3	23	..	..	2	100	12	8	8	..	8	6	348	6	..	..	348	Twenty infected houses were disinfected.	
		6	2	..	6	..	6	..	6	..	23	..	..	..	..	..	..	..	..	..	..	..	..	..	20		
		6	6	..	20	10	30	40	3	23	..	..	..	2	100	12	8	8	..	8	6	282	..	..	6		282
Whittington. 9,700.	Informal notices served } and inspections } Legal notices served } Nuisances, &c., abated }	..	..	6	8	10	25	..	..	..	..	..	2	..	39	2	4	..	2	..	89	2	..	..	89	180 infected houses were disinfected. Disinfectants were supplied free of charge, and a card of instructions was given in every case of infectious disease. Houses were also visited personally.	
		..	..	109	60	51	68	..	1	..	3	25	1	..	38	..	3	..	..	..	1	360	1	1	1		360
		..	..	115	68	61	93	..	1	..	3	25	3	..	68	2	7	..	2	1	449	..	..	..	449		
Wirksworth. 3,770.	Informal notices served } and inspections } Legal notices served } Nuisances, &c., abated }	350	1	6	13	4	87	1	1	..	..	..	1	2	6	1	1	..	..	4	478	..	..	..	478	Thirteen houses were infected, of which 8 were disinfected.	
		25	..	..	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	29	1	4	29		
		25	..	6	13	4	87	1	1	..	..	..	..	1	2	6	..	1	..	..	4	152	..	..	..		152

SUMMARY OF SANITARY INSPECTORS' WORK.

RURAL.

Districts and Populations.	Dwelling Houses.		Drainage.				Closets and Ashpits.					Surface of Courts and Yards.	Eaves Spouts and Down Spouts.	Urinals Defective.	Water Supply.	Offensive Accumulations.	Animals in- properly kept.	Pigsties.	Smoke nuisance.	Overcrowding.	Foul conditions of houses.	Totals.	Precautions taken by Inspector against Infectious Disease, the Sale of Adulterated Food and Drugs and Unsound Meat, and under the Canal Boats Act.
	Repaired.	Unfit for habitation.	No discon- nection of Waste pipe.	Defective Traps, and Inlets, and Drains.	Drains obstructed.	Insanitary Privies and Ashpits.	Insufficient Closet Accommo- dation.	Conversion of Privies into W.C.s.	Defective Water Closets.														
Ashbourne, 10,700.	23	3	3	15	5	5	3	..	1	1	1	8	3	2	15	8	3	2	..	3	3	95	Of 43 houses infected, 35 were disin- fected. All cases of infectious diseases were isolated as well as possible in their own houses.
	8	3	..	4	..	3	1	..	..	..	..	2	..	..	..	2	..	..	2	..	23		
	8	2	3	16	5	6	2	..	1	1	1	8	3	1	7	8	3	1	..	5	3	73	
Bakewell, South. 8,100.	..	1	..	..	..	145	..	..	1	..	1	5	..	..	..	5	..	..	..	..	..	153	Eighteen infected houses were fumi- gated. One school was also disinfected. Drains cleaned out at Elton and Over Haddon.
	..	1	32	9	..	38	9	..	..	..	..	12	..	12	..	..	..	12	..	1	102		
	..	1	32	9	..	138	9	..	1	..	1	..	..	1	..	..	..	12	..	1	209		
Bakewell, North. 10,500.	270	2	..	158	6	79	8	1	2	..	2	22	..	10	..	22	..	10	1	1	..	562	Twenty-three houses were infected and twenty were disinfected. Sewers cleaned out at Hathersage and other places.
	2	1	38	139	3	12	7	..	..	..	..	..	..	..	..	..	..	..	1	..	203		
	..	2	34	158	9	57	6	1	2	..	2	22	..	10	..	22	..	10	1	..	305		
Basford 5,800.	38	..	4	..	5	7	..	..	..	..	..	8	1	2	..	8	..	2	..	1	67	All cases of infectious disease were visited by Inspector and Medical Officer of Health when necessary. 40 houses were infected and 16 disinfected by an Official of the Council. 4 schools were disinfected.	
	..	..	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4		
	..	..	4	..	5	7	..	..	..	..	..	8	1	2	..	8	..	2	..	..	28		
Belper, 24,500.	2215	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2215	One hundred and twenty cases of in- fectious disease were inquired into. Ten inspections of Canal Boats.	
	253	..	..	111	..	..	..	..	5	..	5	..	..	..	..	..	..	..	..	..	253		
	397	..	..	..	..	45	..	..	..	..	..	..	..	..	..	..	..	..	..	..	568		
Blackwell. 21,000.	184	8	90	126	112	4611	..	..	28	..	28	197	..	1001	51	197	..	1001	..	349	40	6797	Arrangements made for disinfection (by sulphur) of houses after Scarlet Fever. Disinfectants were distributed free to occupiers of disinfected houses.
	25	..	..	14	8	23	..	..	..	..	..	7	..	9	41	7	..	9	..	8	5	140	
	47	1	45	63	56	105	..	..	2	..	2	61	..	50	41	61	..	50	..	8	20	499	

RURAL—continued.

Districts and Population.		Dwelling Houses.		Drainage.			Closets and Ashpits.				Surface of Courts and Yards.			Flues Spouts and Down Spouts.	Urinals Defective.	Water Supply.	Offensive Accumulations.	Animals im- properly kept.	Pigsties.	Smoke nuisance.	Overcrowding.	Foul conditions of houses.	Totals.	Precautions taken by Inspector against Infectious Disease, the Sale of Adulterated Food and Drugs and Unsound Meat, and under the Canal Boats Act.
		Repaired.	Unfit for habitation.	No discon- nection of waste pipe.	Defective Traps, and Inlets, and Drains.	Drains obstructed.	Insanitary Privies and Ashpits.	Insufficient Closet Accommo- dation.	Conversion of Privies into W.C.'s.	Defective Water Closets.	and Yards.	Flues Spouts and Down Spouts.	Urinals Defective.	Water Supply.	Offensive Accumulations.	Animals im- properly kept.	Pigsties.	Smoke nuisance.	Overcrowding.	Foul conditions of houses.	Totals.			
Chapel-en- le-Frith. 13,500.	Informal notices served } and inspections } Legal notices served } Nuisances, &c., abated }	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	65	2 houses were disinfected after infec- tious disease; 8 samples of water were submitted to County Analyst 2 were pronounced good.	
		..	..	..	61	..	34	..	..	..	..	..	..	..	..	..	..	..	..	..	..	25		
		8	..	..	..	..	..	..	..	4	..	..	..	..	4	9	1	..	1	..	..	..	..	
Chesterfield. 68,000.	Informal notices served) and inspections) Legal notices served) Nuisances, &c., abated)	..	149	..	..	..	191	..	21	1	36	..	6	4	448	11	..	..	..	12	4	883	161 houses were limewashed during disinfection after infectious disease; 278 houses were disinfected by the Assistant Inspector.	
		..	149	..	..	..	141	..	..	..	..	36	..	..	..	448	11	..	..	12	4	801		
Clown. 10,000.	Informal notices served) and inspections) Legal notices served) Nuisances, &c., abated)	608	..	3	19	2	24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	656	Fifty-one houses were infected and 48 were disinfected.	
		..	..	..	19	..	24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	72		
		8	..	3	..	..	..	..	..	..	..	..	..	..	4	10	..	..	..	1	..	..		
Glossop Dale. 4,700.	Informal notices served) and inspections } Legal notices served } Nuisances, &c., abated }	150	..	..	..	..	46	3	..	..	..	..	..	..	..	..	..	..	..	..	199	Disinfection of bedding and 5 houses.		
		..	..	..	..	..	26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	26		
		..	..	..	..	..	23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	23		
Hartshorne and Seals. 6,400.	Informal notices served) and inspections } Legal notices served } Nuisances, &c., abated }	..	2	2	6	2	3	2	..	..	..	..	..	3	4	..	..	..	..	..	..	24	Cases of infectious disease were visited and disinfectants supplied, and where practicable, fumigated. 13 houses were infected and 9 were disinfected.	
		..	2	..	6	2	3	..	..	..	..	..	..	2								2	..	..
		..	2	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Hayfield. 4,000.	Informal notices served) and inspections } Legal notices served } Nuisances, &c., abated }	6	..	3	6	..	11	..	..	..	..	..	..	..	7	..	..	..	..	..	..	33	Six houses were infected and 5 were disinfected. Handbills were distri- buted in the district, re Scarlet Fever.	
		..	..	..	7	..	153	11	..	..	..	..	..	..	..	8	..	..	..	..	..	182		
		..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		

RURAL—continued.

Districts and Population.	Dwelling Houses.		Drainage.				Closets and Ashpits.				Surface of Courts and Yards.	Down Spouts.	Urinals Defective.	Water Supply.	Offensive Accumulations.	Animals im- properly kept.	Pigsties.	Smoke nuisance.	Overcrowding.	Foul conditions of houses.	Totals.	Precautions taken by Inspector against Infectious Disease, the Sale of Adulterated Food and Drugs and Unsound Meat, and under the Canal Boats Act.	
	Repaired.	Unfit for habitation.	No discon- nection of waste pipe.	Defective Traps, Inlets, and Drains.	Drains obstructed.	Insanitary Privies and Ashpits.	Insufficient Closet Accommo- dation.	Conversion of Privies into W.C.'s.	Defective Water Closets.														
Norton. 12,250.	Informal notices served } and inspections }	298	4	13	18	18	9	3	9	13	5	7	..	..	..	..	..	..	3	4	6	410	Nineteen samples of water have been analysed, of which 17 were con- demned. 86 houses were infected and 82 were disinfected. 2 schools have been di-infected.
	Legal notices served	18	..	19	28	30	35	..	..	4	51	29	1	1	..	8	2	4	..	..	2	240	
	Nuisances, &c., abated	36	4	29	35	71	48	3	9	17	56	36	1	1	..	7	9	2	7	..	8	382	
Repton. 15,100.	Informal notices served } and inspections	883	..	17	163	9	102	3	..	..	1	20	4	4	5	1	1	4	..	..	1	1217	Twenty-six houses were disinfected.
	Legal notices served	2	..	25	..	..	28	1	..	..	..	3	..	1	1	..	..	..	..	..	61		
	Nuisances, &c., abated	4	..	5	95	9	76	2	..	..	1	20	3	3	3	5	1	4	..	..	1	229	
Shardlow. 30,000.	Informal notices served } and inspections ..	..	4	2	18	1	9	1	21	1	2	..	..	4	5	5	..	..	..	2	1	71	Houses, clothes, etc., were disinfected after all cases of infectious disease.
	Legal notices served	..	4	1	3	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	12		
	Nuisances, &c., abated	..	4	2	21	2	13	1	21	1	..	..	..	4	5	..	..	..	..	..	1	79	
Sudbury. 2,650.	Informal notices served } and inspections	..	2	22	22	..	67	..	..	10	..	..	..	27	8	..	30	..	..	2	6	196	
	Legal notices served	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2		
	Nuisances, &c., abated	1	1	3	5	..	5	..	..	1	..	..	..	5	3	..	3	..	..	1	3	39	

TABLE III.]

COUNTY OF DERBY. Year ending December 31st, 1898.

Table giving the Birth Rate and the Death Rates from several causes in each of the URBAN Sanitary Districts of the County.

Notification Act in Force, 1899.	URBAN DISTRICT COUNCIL.	MEDICAL OFFICER OF HEALTH.	AREA in Acres.	POPULATION.			BIRTHS.	DEATHS.	Annual Rates per 1,000 of Estimated Population.						
				CENSUS, APRIL, 1881.	CENSUS, APRIL, 1891.	Estimated 1898.			Birth Rate.	Crude Death Rate.	Zymotic Death Rate.	Death Rate from continued Fevers & Diarrhoeal Diseases.	Phthisis Death Rate.	Respiratory Death Rate.	Infantile Death Rate per 1,000 Births.
Yes	ALFRETON	E. Gaylor, L.R.C.P.E.	4,626	13,885	15,355	17,700	594	285	33.55	16.15	.90	.33	.50	4.74	185.1
Yes.	ALVASTON AND BOULTON	W. H. Wright, M.R.C.S.	2,155	1,506	3,116	4,250	137	50	32.23	11.76	1.68	.23	.70	3.76	94.8
Yes.	ASHBOURNE (with Workhouse)	P. R. Littleton, M.R.C.S.	572	3,485	3,810	4,000	122	92	30.50	23.10	5.75	1.25	3.50	1.76	204.9
	" (without Workhouse)	"		3,485	3,810	4,000	122	75	30.50	18.75	5.50	1.25	2.75	1.00	196.7
Yes.	BAKEWELL (with Workhouse)	C. W. Evans, M.B.	3,064	2,502	2,748	2,900	67	50	23.10	17.24	.68	...	.68	1.57	119.4
	" (without Workhouse)	"		2,502	2,748	2,900	62	32	21.37	11.03	.68	...	.68	1.03	129.0
Yes.	BASLOW AND BUNNELL	P. S. Fentem, M.D.	5,635	843	864	890	11	12	12.35	13.48	...	...	1.12	2.24	90.9
Yes.	BELPER (with Workhouse)	R. G. Allen, M.R.C.S.	3,183	9,875	10,420	11,100	367	222	33.05	20.00	1.71	.72	1.08	3.24	168.9
	" (without Workhouse)	"		9,875	10,420	11,100	367	170	33.05	15.31	1.71	.72	.63	2.34	163.4
Yes.	BOLSOVER	T. W. Cole, M.B.	4,955	2,281	3,662	5,550	286	104	51.53	18.73	3.06	2.52	2.16	2.70	178.3
Yes.	BONSALL	J. C. Innes, L.R.C.S.	2,447	1,354	1,329	1,350	47	19	34.61	14.07	...	...	.74	.74	42.5
Yes.	BRAMPTON AND WALTON	J. A. Goodfellow, M.B.	10,102	2,457	2,532	2,700	63	28	23.33	10.37	.37	...	1.85	1.48	63.4
Yes.	BUXTON	Fredk. Turner, M.R.C.S.	1,189	6,025	7,540	8,900	220	132	24.71	14.83	1.57	.22	.89	2.80	150.0
	" (without visitors Devonshire Hospital & Wye House Asylum)	"		6,025	7,540	8,900	220	107	24.71	12.02	1.57	.22	.44	2.47	150.0
Yes.	CHESTERFIELD (with Workhouse)	H. M. Richards, M.D., D.P.H.	1,219	19,835	22,009	25,000	890	616	35.60	24.64	3.68	2.08	1.36	4.12	231.4
	" (without Workhouse)	"		19,835	22,009	25,000	889	539	35.56	21.56	3.64	2.04	1.20	3.80	206.0
NO.	CLAY CROSS	Wm. Duncan, M.B., C.M.	1,402	6,879	7,727	9,000	284	164	31.55	18.22	2.22	1.55	.77	4.00	207.7
Yes.	DRONFIELD	H. M. Richards, M.D., D.P.H.	1,016	4,331	3,433	4,100	122	60	21.75	14.63	1.21	.48	1.21	1.70	155.7
Yes.	FAIRFIELD	C. J. Bennet, M.R.C.S.	3,445	1,464	2,103	2,600	103	49	41.53	18.84	.33	...	.33	3.46	148.1
Yes.	GLOSSOP (with Workhouse)	D. J. Mackenzie, M.D.	3,050	19,574	22,414	23,400	580	436	24.78	18.63	2.43	1.53	1.49	3.24	179.3
	" (without Workhouse)	"		19,574	22,414	23,400	580	416	24.78	17.77	2.43	1.53	1.36	2.99	179.3
Yes.	HEAGE	G. Garnham, M.R.C.S.	2,367	2,405	2,490	2,800	111	28	39.64	10.00	.71	.71	...	...	108.1
Yes.	HEANOR	W. H. Turton, M.D.	1,579	6,822	9,779	11,500	424	184	36.86	16.00	3.38	2.43	1.88	1.73	115.0
Yes.	ILKESTON	J. G. Willis, L.R.C.P.E.	2,562	14,122	19,741	25,800	954	452	36.98	18.51	2.20	1.93	.93	3.18	194.9
Yes.	LONG EATON	A. B. Chambers, M.D.	2,099	6,217	9,686	12,400	358	148	28.87	11.91	1.85	.71	1.12	1.69	131.2
NO.	MATLOCK	Wm. Moxon, M.R.C.S.	4,203	4,395	5,285	5,900	162	102	27.45	17.28	1.18	...	2.20	2.43	135.8
Yes.	MATLOCK BATH	Geo. Harvey, L.R.C.P.	337	1,593	1,846	1,960	44	35	22.44	17.85	1.02	...	2.04	2.55	159.0
Yes.	NEWBOLD AND DUNSTAN	W. S. Symes, L.R.C.P.	2,802	4,769	5,192	5,550	222	107	40.00	19.27	5.04	2.52	.36	3.24	193.6
Yes.	NEW MILLS (with Workhouses)	J. E. Anderton, M.R.C.S.	5,205	6,552	6,661	6,720	197	134	29.31	19.94	2.52	.44	1.48	3.67	208.1
	" (without Workhouse)	"		6,552	6,661	6,720	197	128	29.31	19.04	2.52	.44	1.49	3.42	208.1
Yes.	NORTH DARLEY	Wm. Moxon, M.R.C.S.	5,142	1,844	2,179	2,400	77	26	32.08	10.83	.41	.41	1.25	1.25	90.9
Yes.	RIPLEY	E. Gaylor, L.R.C.P.E.	2,836	7,860	8,774	10,300	349	157	33.00	15.24	1.84	.77	1.26	3.10	150.0
Yes.	SOUTH DARLEY	J. L. Fletcher, M.B.	2,007	679	754	820	27	21	32.92	25.60	3.65	...	...	6.09	148.1
Yes.	SWADLINCOTE	J. Hamilton, M.D.	3,670	11,893	13,889	15,500	631	281	40.70	18.12	2.90	.96	.58	3.74	167.9
Yes.	WHITTINGTON	A. M. Palmer, M.R.C.S.	1,581	7,271	8,793	9,700	372	176	38.35	18.14	3.40	2.16	.41	3.91	198.9
Yes.	WIRKSWORTH	A. E. Broster, M.R.C.S.	3,027	3,678	3,725	3,770	118	58	31.29	15.38	1.06	.79	2.65	2.88	57.7
	URBAN DISTRICTS	...	87,567	176,501	207,819	238,550	7,985	4,229	33.26	17.72	2.32	1.22	1.13	3.15	175.2

TABLE III.]

COUNTY OF DERBY.

Year ending December 31st, 1898.

Table giving the Birth Rate and the Death Rates from several causes, in each of the RURAL Sanitary Districts of the County.

Notification Act in Force, 1899.	RURAL SANITARY DISTRICT.	MEDICAL OFFICER OF HEALTH.	AREA (Acres).	POPULATION.			BIRTHS.	DEATHS.	ANNUAL RATES PER 1,000 OF ESTIMATED POPULATION.							
				Census, April, 1881.	Census, April, 1891.	Estimated 1898.			Birth Rate.	Crude Death Rate.	Zymotic Death Rate.	Death rate from Continued Fevers and Diarrhoeal Diseases.	Phthisis Death Rate.	Respiratory Death Rate.	Infantile Death Rate per 1,000 Births.	
Yes	ASHBOURNE	C. E. Potter, M.B.	70,381	10,793	10,631	10,700	297	146	27·75	13·64	·84	·28	·84	·95	97·6	
Yes	BAKEWELL (South)	J. Kuox, M.D.	33,742	7,727	7,860	8,100	217	107	26·79	13·20	·37	·12	1·48	1·60	92·1	
Yes	BAKEWELL (North)	P. S. Fentem, M.D.	50,487	10,830	10,617	10,500	296	164	28·19	15·61	1·23	·85	·85	2·95	87·8	
Yes	BASFORD (Derbyshire portion)	G. B. Wray, M.R.C.S.	5,500	5,388	5,614	5,800	168	91	28·96	15·63	1·55	1·03	·68	3·27	148·8	
Yes	BELPER (A) (North)	E. Gaylor, L.R.C.P.E....	32,334	9,488	10,080	11,400	257	124	22·54	10·87	·52	·08	·70	1·22	81·7	
Yes	BELPER (B) (South)	J. Allen, M.R.C.S.	18,003	11,364	11,132	13,100	401	138	30·61	10·53	1·52	·30	·30	2·36	107·2	
Yes	BLACKWELL	J. O. Littlewood, M.R.C.S., D.P.H. ...	21,140	12,777	16,773	21,000	1,044	383	49·71	18·23	3·00	2·47	1·09	3·19	169·5	
Yes	CHAPEL-EN-LE-FRITH	C. J. Bennet, M.R.C.S.	78,859	12,557	14,013	13,500	359	210	26·59	15·55	1·40	·51	·74	2·44	116·9	
Yes	CHESTERFIELD	Herbert Peck, M.B., C.M., D.P.H. ...	69,839	54,112	58,382	68,000	2,393	1,006	35·19	14·79	1·77	·97	·73	2·60	148·7	
Yes	CLOWN	C. Wills, M.R.C.S.	13,427	5,817	6,830	10,000	424	180	42·40	18·00	2·40	1·60	1·30	2·10	191·0	
NO	GLOSSOP DALE	D. J. Mackenzie, M.D....	17,893	3,976	4,383	4,700	99	55	21·06	11·70	1·48	1·27	·63	1·70	80·8	
Yes	HARTSHORNE & SEALS	R. Logan, M.R.C.S.	15,282	6,211	7,013	6,400	206	120	32·18	18·75	2·65	·62	·46	5·00	199·0	
Yes	HAYFIELD	C. J. Bennet, M.R.C.S.	10,282	4,043	3,952	4,000	85	61	21·25	15·25	1·50	·25	1·50	·75	117·6	
Yes	NORTON	A. K. Gale, M.R.C.S.	10,630	5,400	8,044	12,250	364	147	29·71	12·00	2·44	1·14	·57	1·55	109·8	
Yes	REPTON (with County Asylum)	E. Riding, M.R.C.S.	54,263	14,233	14,562	15,100	447	295	29·60	19·53	2·51	·92	2·38	2·98	143·1	
Yes	SHARDLOW	C. Harwood, M.D.	45,620	24,879	26,153	30,000	978	453	32·60	15·10	1·73	·86	·80	2·20	137·0	
Yes	SUDBURY	B. H. Herbert, M.R.C.S.	17,300	2,627	2,589	2,650	67	32	25·28	12·07	·37	·37	·75	3·39	59·7	
	RURAL DISTRICTS OF DERBYSHIRE		564,982	202,222	218,634	247,200	8,102	3,712	32·77	15·01	1·76	·92	·90	2·46	138·3	
	URBAN DISTRICTS OF DERBYSHIRE		87,567	176,501	207,819	238,560	7,935	4,229	33·26	17·72	2·32	1·22	1·13	3·15	175·2	
	WHOLE ADMINISTRATIVE COUNTY		652,549	378,723	426,453	485,760	16,037	7,941	33·01	16·34	2·04	1·07	1·01	2·80	156·6	

Table A of the Local Government Board.

Table of Deaths during the year 1898 in each of the URBAN Sanitary Districts, Classified according to Ages and Diseases.

Sanitation Act in force, 1869	URBAN DISTRICT COUNCIL.	DEATHS FROM ALL CAUSES AT SUBJOINED AGES.						DEATHS FROM SUBJOINED CAUSES.															Totals.								
		Under 1 year.	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards.	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diphtheria or Dysentery.	Rheumatic Fever.	Phthisis.	Bronchitis, Pneumonia, & Pleurisy.	Heart Disease.	Injuries.	All other Diseases.	All Causes.	At all ages.		
Yes.	ALFRETON	110	35	5	8	73	55	Under 5 ...	1	1	1	...	1	...	...	2	...	1	4	2	5	...	1	49	...	3	77	145	286		
Yes.	ALVASTON AND BOULTON ...	13	16	2	2	7	10	Over 5 ...	2	...	...	...	...	...	...	...	...	...	1	5	1	...	3	35	16	3	75	141	...		
Yes.	ASHBOURNE (with Workhouse) ...	25	20	4	3	22	18	Under 5 ...	...	...	...	...	...	...	...	...	...	...	10	8	4	...	8	...	4	2	5	21	50		
Yes.	BAKEWELL (with Workhouse) ...	8	4	1	2	14	21	Over 5 ...	...	...	...	...	...	...	...	...	...	...	2	...	1	...	6	7	2	1	30	47	92		
Yes.	BASLOW AND BUBNELL ...	1	...	...	...	6	5	Under 5 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	2	6	...	8	12	50	
Yes.	BELPER (with Workhouse) ...	62	23	9	6	60	72	Over 5 ...	6	...	...	...	...	...	...	...	...	...	1	3	8	...	1	2	1	...	7	11	12		
Yes.	BOLSOVER	51	12	3	2	16	20	Under 5 ...	1	...	...	...	...	...	...	1	...	...	...	...	2	14	...	2	6	...	39	63	104		
Yes.	BONSALL	2	...	1	...	7	9	Under 5 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10	9	3	...	18	41	...		
Yes.	BRAMPTON AND WALTON ...	4	2	...	3	8	11	Under 5 ...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	1	1	2	11	17	...		
Yes.	BUNTON	33	18	3	6	39	33	Over 5 ...	1	...	...	...	...	...	...	...	...	...	11	...	1	...	...	5	3	...	14	22	...		
Yes.	CHESTERFIELD (with Workhouse) ...	206	78	9	33	179	111	Under 5 ...	4	2	...	...	1	...	...	...	...	...	18	14	42	...	5	2	33	50	31	19	139	284	616
NO.	CLAY CROSS	59	20	8	8	39	30	Over 5 ...	2	...	...	...	5	...	...	3	...	...	...	...	12	...	3	9	...	6	2	39	85	164	
Yes.	DRONFIELD	19	6	4	2	14	15	Under 5 ...	1	...	...	...	...	...	...	1	...	...	...	1	1	2	...	...	3	...	18	25	...		
Yes.	FAIRFIELD	16	7	3	1	10	12	Over 5 ...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	5	4	2	...	22	35	60	
Yes.	GLOSSOP (with Workhouse) ...	104	42	17	16	115	142	Under 5 ...	8	1	4	...	14	...	...	...	...	...	2	...	18	...	1	34	1	1	75	146	...		
Yes.	HEAGE	12	3	...	1	2	10	Over 5 ...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	13	26	...		
Yes.	HEANOR	70	15	12	15	37	35	Under 5 ...	3	1	1	...	5	...	...	1	...	...	...	...	21	...	9	...	...	2	45	85	...		
Yes.	ILKESTON	186	48	19	25	99	75	Over 5 ...	...	1	2	...	29	...	...	2	...	...	...	...	2	2	24	36	14	3	105	218	452		
Yes.	LONG EATON	47	23	9	10	35	24	Under 5 ...	2	3	3	...	...	...	...	...	...	...	3	...	7	...	9	1	...	42	70	...			
NO.	MATLOCK	22	7	2	4	39	28	Over 5 ...	...	1	...	...	...	...	...	...	...	...	4	2	...	...	14	12	16	2	29	78	148		
Yes.	MATLOCK BATH	7	4	...	2	10	12	Under 5 ...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	13	10	15	2	33	73	102		
Yes.	NEWBOLD & DUNSTAN ...	43	23	8	4	10	19	Over 5 ...	7	1	...	...	...	...	...	...	...	...	2	3	10	...	4	3	1	...	16	24	35		
Yes.	NEW MILLS (with Workhouse) ...	41	18	1	6	39	29	Under 5 ...	1	...	...	...	1	...	...	...	...	...	13	...	3	...	2	11	6	1	16	41	167		
Yes.	NORTH DARLEY	7	...	...	2	6	11	Over 5 ...	...	...	...	...	...	...	...	2	...	...	1	...	1	1	7	10	10	3	40	75	...		
Yes.	RIPLEY	51	21	4	10	40	31	Under 5 ...	3	...	...	...	...	...	...	...	...	...	5	1	8	...	3	1	5	2	7	19	...		
Yes.	SOUTH DARLEY	4	3	2	3	4	5	Over 5 ...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	11	16	6	2	48	85	126		
Yes.	SWADLINCOTE	106	50	11	15	67	32	Under 5 ...	...	...	3	...	...	...	...	...	...	...	23	3	14	...	35	1	5	72	156	...			
Yes.	WHITTINGTON... ..	74	28	5	6	34	29	Over 5 ...	4	...	...	...	...	...	...	...	...	...	1	4	3	19	...	23	17	10	61	125	...		
Yes.	WIRKSWORTH... ..	8	6	1	6	22	15	Under 5 ...	1	...	...	...	...	...	...	...	...	...	...	...	2	...	4	16	13	1	37	74	...		
	29 URBAN DISTRICTS OF DERBYSHIRE	1391	532	143	201	1043	919	Under 5 ...	44	12	14	...	4	...	...	13	...	2	108	54	209	...	22	365	6	30	1053	1923	4229		
								Over 5 ...	20	5	3	...	62	...	...	13	...	4	3	...	17	11	249	388	261	84	1886	3306			
								At all ages	64	17	17	...	66	...	...	13	...	6	111	54	226	11	271	753	267	114	2239	4229	4229		

COUNTY OF DERBY.

Table A of the Local Government Board.

Table of Deaths during the year 1898 in each of the RURAL Sanitary Districts, Classified according to Ages and Diseases.

Notification Act in force, 1899.	RURAL DISTRICT COUNCIL.	DEATHS FROM ALL CAUSES AT SUBJOINED AGES.							DEATHS FROM SUBJOINED CAUSES.															Totals.						
		Under 1 year.	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards.	Smallpox.	Scarlatina.	Diphtheria.	Membranous Group.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhoea or Dysentery.	Rheumatic Fever.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	All other Diseases.	All Causes.	At all ages	
Yes.	ASHBOURNE ...	29	11	6	7	32	61	Under 5 ...	...	1	...	...	...	...	...	...	...	...	...	2	2	2	...	10	...	1	22	40	146	
								Over 5 ...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	9	11	12	4	68	106		
Yes.	BAKEWELL (South) ...	20	7	4	8	33	35	Under 5 ...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	6	2	1	16	27	107		
								Over 5 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12	7	...	3	50	80		
Yes.	BAKEWELL (North) ...	26	18	7	7	58	48	Under 5 ...	...	1	...	...	...	...	...	...	...	...	...	...	2	7	...	24	19	4	61	120	164	
								Over 5 ...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	9	8	...	1	17	34		
Yes.	BASFORD ...	25	9	3	5	23	26	Under 5 ...	...	...	...	...	...	...	...	1	...	...	...	2	...	5	...	11	7	3	30	57	91	
								Over 5 ...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	4	6	...	...	21	31		
Yes.	BELPER (A) (West) ...	21	10	7	7	33	46	Under 5 ...	...	...	2	...	...	1	...	1	...	...	...	4	4	4	...	7	8	18	5	50	93	124
								Over 5 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	27	59	
Yes.	BELPER (B) (East) ...	43	16	8	4	27	40	Under 5 ...	...	2	...	...	...	...	...	...	...	...	...	4	4	4	...	3	16	12	3	41	79	138
								Over 5 ...	...	2	...	...	...	...	...	...	...	...	...	...	1	1	...	13	36	...	3	111	210	
Yes.	BLACKWELL ...	177	33	12	17	85	59	Under 5 ...	...	2	...	...	...	10	...	1	...	...	...	...	1	2	...	10	31	24	10	82	173	383
								Over 5 ...	...	...	1	3	...	...	...	...	...	...	...	7	1	5	...	12	...	...	...	39	68	
Yes.	CHAPEL-EN-LE-FRITH ...	42	26	3	6	60	73	Under 5 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10	21	12	8	89	142		
								Over 5 ...	...	4	1	3	...	...	...	...	...	...	...	16	26	52	...	96	1	3	285	499		
Yes.	CHESTERFIELD ...	356	133	41	51	129	196	Under 5 ...	...	3	2	...	...	12	...	4	...	3	...	...	2	2	48	81	62	30	268	517	1,006	
								Over 5 ...	...	1	1	...	...	1	...	...	...	...	...	2	3	12	...	13	...	1	73	107		
Yes.	CLOWN ...	81	26	5	7	32	29	Under 5 ...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	13	8	10	1	36	73	160	
								Over 5 ...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	3	...	...	12	17		
NO.	GLOSSOP DALE ...	6	9	2	2	16	16	Under 5 ...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	3	5	4	1	20	38		
								Over 5 ...	...	...	1	1	...	...	...	...	...	...	...	9	2	...	...	16	...	...	...	22	51	
Yes.	HARTSHORNE AND SEALS ...	41	10	3	6	25	35	Under 5 ...	...	...	...	...	...	4	...	...	...	...	...	...	...	...	3	16	13	1	32	69		
								Over 5 ...	...	...	...	...	...	...	...	...	...	...	...	3	1	1	...	...	...	...	...	...		
Yes.	HAYFIELD ...	10	6	2	2	21	20	Under 5 ...	...	...	1	...	...	...	...	...	...	...	...	3	1	1	...	2	...	...	1	29	45	61
								Over 5 ...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Yes.	NORTON ...	40	21	8	7	40	31	Under 5 ...	...	1	1	...	...	1	...	...	...	...	...	5	7	12	...	10	...	...	1	23	61	147
								Over 5 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Yes.	REPTON (with County Asylum) ...	61	24	8	12	118	63	Under 5 ...	...	...	...	1	...	...	...	...	...	...	...	...	8	12	...	21	2	1	34	88		
								Over 5 ...	...	...	...	...	...	...	...	...	...	...	...	5	1	2	...	36	24	33	6	99	207	295
Yes.	SHARDLOW ...	134	54	23	13	97	132	Under 5 ...	...	3	4	...	...	1	...	...	...	...	...	...	...	...	1	33	1	7	98	188		
								Over 5 ...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	1	33	38	18	146	266	453	
Yes.	SUDBURY ...	4	4	...	2	10	12	Under 5 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	8		
								Over 5 ...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	2	5	6	...	10	24	32	
	RURAL DISTRICTS OF DERBYSHIRE ...	1,121	417	142	163	939	930	Under 5 ...	...	17	8	13	...	3	...	...	...	...	73	67	177	...	18	296	6	20	840	1,638		
								Over 5 ...	...	10	8	1	...	37	...	9	...	4	6	3	14	...	8	313	294	102	1,160	2,174		
	At all ages								...	27	16	14	...	40	...	9	...	1	79	70	191	...	8	609	300	122	2,000	3,712	3,712	

COUNTY OF DERBY. Year ending December 31st, 1898.

Summary of Table A. of the Local Government Board.

DISTRICTS.	DEATHS FROM ALL CAUSES AT SUBJOINED AGES.							DEATHS FROM SUBJOINED CAUSES.																					
	Under 1 year.	1 and under 6	5 and under 15	15 and under 25	25 and under 65	65 and upwards.		Smallpox.	Scarlatina.	Diphtheria.	Membranous Group.	CONTINUED FEVERS.				Puerperal Fever.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhea and Dysentery.	Rheumatic Fever.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	All other Diseases.	All Causes.	Total Deaths at all ages.
												Typhus.	Enteric or Typhoid.	Continued.	Relapsing.														
[I.] Under 5 and over 6.																													
URBAN DISTRICTS	1391	532	143	201	1043	919	{ Under 5	...	44	12	14	...	4	...	...	...	...	2	108	54	209	...	22	365	6	30	1053	1923	4229
							{ Over 5	...	20	5	3	...	62	...	...	13	...	4	3	...	17	11	249	388	261	84	1186	2306	
RURAL DISTRICTS...	1121	417	142	153	939	930	{ Under 6	...	17	8	13	...	3	...	...	...	...	73	67	177	...	18	296	6	20	840	1538	3712	
							{ Over 5	...	10	8	1	...	37	...	...	9	...	4	6	3	14	8	206	313	294	102	1160		2174
WHOLE COUNTY	2512	949	285	364	1982	1849	{ Under 5	...	61	20	27	...	7	...	...	...	...	2	181	121	386	...	40	661	12	50	1893	3461	7941
							{ Over 5	...	30	13	4	...	99	...	...	22	...	8	9	3	31	19	454	701	555	186	2346	4480	
[II.] At all Ages.																													
URBAN DISTRICTS	1391	632	143	201	1043	919	At all ages	...	64	17	17	...	55	...	...	13	...	6	111	64	226	11	271	753	267	114	2239	4229	4229
RURAL DISTRICTS	1121	417	142	163	939	930	At all ages	...	27	16	14	...	40	...	...	9	...	4	79	70	191	8	223	609	300	122	2000	3712	3712
WHOLE COUNTY	2512	949	285	364	1982	1849	At all ages	...	91	33	31	...	106	...	...	22	...	10	190	124	417	19	494	1362	567	236	4239	7941	7941

COUNTY OF DERBY.

MAP SHEWING SANITARY DISTRICTS

EXPLANATION

RURAL BOUNDARIES SHEWN: ~
 URBAN DO DO ~
 BOROUGH'S SHEWN: ⑪
 URBAN DISTRICTS: ⑧

URBAN DISTRICTS.

1. ALFRETON
2. ALVASTON & BOULTON
3. ASHBOURNE
4. BAKEWELL
5. BASLOW
6. BELPER
7. BONSALE
8. BOLSOVER
9. BRAMPTON & WALTON
10. BUXTON
11. CHESTERFIELD BORO'
12. CLAY CROSS
13. DRONFIELD
14. FAIRFIELD
15. GLOSSOP BOROUGH
16. HEAGE
17. HEANOR
18. ILKESTON BOROUGH
19. LONG EATON
20. MATLOCK
21. MATLOCK BATH
22. NEWBOLD & DUNSTAN
23. NEW MILLS
24. NORTH DARLEY
25. RIPLEY
26. SOUTH DARLEY
27. SWADLINCOTE
28. WHITTINGTON
29. WIRKSWORTH

ISOLATION HOSPITALS ACT, 1893.

EXPLANATION.

HOSPITAL DISTRICTS ALREADY FORMED, SHEWN:—

" " PROPOSED, SHEWN:—

" SITES APPROVED, SHEWN:—

" ERECTED.

Scale 4 Miles = 1 Inch



ISOLATION HOSPITALS ACT, 1893.

EXPLANATION.

HOSPITAL DISTRICTS ALREADY FORMED, SHEWN:—

„ „ PROPOSED, SHEWN:—

„ SITES APPROVED, SHEWN:—

„ ERECTED.